Clinical Lecture
ON THE
VIS MEDICATRIX NATURÆ IN THE TREATMENT OF WOUNDS.

Delivered in the Aberdeen Royal Infirmary,

BY J. C. OGILVIE WILL, M.D., F.R.S. ED.

GENTLEMEN,—I am unwilling to allow the patient now before you, whose left thigh I amputated recently, to leave hospital without first bringing the history of her case subsequent to operation under your notice, as it illustrates a doctrine which I am constantly inculcating in connexion with the treatment of wounds, and as it is an excellent example of what may be achieved by the careful use of antiseptic measures. For several years my efforts have been concentrated in an endeavour to procure what I regard as the perfection of treatment of cases submitted to operative interference—viz., absolute rest of the parts in order that the *vis medicatrix naturæ*, which is all-potent, may proceed uninterruptedly. Let us, then, consider in what unrest consists, and how it may be best avoided. Movement of the limb or other part operated on during the application of dressings is the most apparent factor in the production of unrest, and the presence of foreign matter within the wound is another; and if we succeed in preventing the latter, the necessity for the former will not present itself. We must therefore, in the first place, endeavour to perform our operations in such a manner as to leave the cut parts in the most favourable positions for taking on healing action; and with this in view, carefully carried out designs in operating will materially assist us, so that tension on the flaps, when they are brought together, may be avoided. All bleeding vessels should be secured, lest the formation of a blood-clot may cause separation of the deeper parts of the wound; adequate drainage, to permit of the ready escape of the discharge, must be provided; and accurate coaptation of the cut edges should be obtained. But even if you attend to all these points, no certainty will follow your efforts unless you take means to prevent the access of the putrefactive germs, with which the atmosphere is loaded, to the cut surfaces, or unless you adopt measures to render them inert before they settle on them. You must therefore carry out Listerism in its utmost detail; and I hope to be able to show that, although increased trouble and complicity have been arraigned as witnesses against its employment, your adoption of it will result in an actual saving of trouble to yourselves, and, what is of far greater moment, in a diminution of suffering to your patients. [Professor Lister's method was fully described and demonstrated.] Such, then, gentlemen, is the mode of carrying out Lister's treatment, and such is the meaning of the different procedures he adopts. The method appears somewhat complicated, but a little practice and much faith make it easy, and, although the expense of the dressings has been urged as an objection, it is really cheap in the long-run.

In addition to the objections already mentioned I may tell you that the utility or uselessness of the spray is at present a matter of hot dispute. Some German surgeons—among whom Professor Trendelenburg of Rostock, who recently paid us a visit, leads the van—regard it as unnecessary; but if we base our treatment upon the germ theory of putrefaction the spray is a necessity, and if we disregard it the basis on which Listerism is built must fall, and the removal of each little item of which the superstructure consists will be but a matter of a short space of time. There is, however, one valid objection to its employment—viz., that carbolic acid, like nearly every other antiseptic substance, is an irritant, and that it may occasion antiseptic suppuration; we should therefore use the spray as seldom as possible. But let me not be misunderstood: I do not mean that the spray should not be used on each occasion of exposure of the wound, but that the dressings should be removed as infrequently as is compatible with safety. Here your guides will be the condition of the temperature and the escape of discharge. If the temperature rises you must remove the dressings for the purpose of discovering the cause of the thermal increase, and if discharge issues through the edges of the external dressing you must apply a fresh layer, lest the putrefactive germs may gain access to the wound. If there be evident pyrexia you must uncover the wound; but in the case of mere escape of aseptic discharge the renewal of the external dressing, leaving the deep one untouched, is all that is required. I may remind you that by the term deep dressing is meant the loose pieces of gauze which are applied over the protective, and which are retained in position by means of a gauze bandage, while the external dressing consists of eight folds of gauze, between the two outermost layers of which a sheet of waterproof material is interposed. For the purpose of preventing the latter dressing from slipping, gauze bandages saturated with gum are employed. By restricting yourselves to the removal of the external dressing alone you avoid disturbance of the healing process in more ways than one; for, however gently you may carry out your proceedings in exposing the wound, interference with that part of the dressing which is in contact with it is inevitably attended by pain and involuntary muscular contraction, which tend to disturb the union of the parts; and further, the wound is not subjected to the action of the carbolic spray, which is, as I have just now said, an irritant. Infrequent dressing is therefore our aim, so that unrest may be avoided, and perfection will be obtained when we are able to leave the dressing, which we apply on the operating table, untouched until cicatrisation is complete. In the case of most major operations that goal has not been reached, but we are almost within sight of it, and if the adage that "straws show how the wind blows" holds good in surgery, our experience in minor operations performed on Listerian principles would teach us that this most coveted result is attainable. In proof I could relate to you the particulars of many cases of minor amputations where the original dressings were allowed to remain untouched for ten or twelve days, and where, on their removal, cicatrisation was found to be perfect; but this has come to be regarded as such a common occurrence, that I should only be occupying your time unnecessarily were I to do so, and as I have cases of greater moment to lay before you, I may at once pass on to them.

And I would first call to your remembrance the case of C. J——, aged twenty-one, on whom Chopart's amputation was performed on February 28th, 1880. The operation was performed under spray in the usual manner; wire and catgut sutures and two stitches of relaxation were inserted. The external dressing was renewed on three occasions, but with the exception of making a small opening through which the drainage-tube was withdrawn on March 4th, the deep dressing was left untouched until March 6th, when, on the exposure of the stump, it was found to be soundly healed throughout its entire extent, excepting at the point where the tube had lain, and even at this point cicatrisation was far advanced. The catgut stitches were all quite loose, and some of them came away with the protective, while the rest of them were readily brushed away with a sponge. The silver wire sutures, instead of being buried in the soft parts, as they would have been had there been swelling of the edges, would have permitted the passage of a fine probe through their loops; but this was not due to their having been freed by ulceration, but to shrinking of the parts through which they had been passed, and on their removal a series of little holes, such as you would make were you to perforate a card with a pin, alone remained to mark the points of entrance and exit. The wires attached to the buttons were relaxed, and the skin upon which the buttons had rested was perfectly normal in its appearance. The protective was moistened with serous discharge, but there was no sign of pus. The highest temperature noted was 99·2° F.

Such a result as this in the short space of one week in the case of an amputation where the flap has a strong tendency to retract, and where, from its nature, it is not easy to maintain exact coaptation, is certainly eminently satisfactory, for we may say that union was practically completed under a single dressing. In coanexion with this case I desire to direct your attention to the subject of wound-drainage. The means employed for this purpose are (1) india-rubber tubes, (2) catgut, (3) horsehair, and (4) decalcified bone-tubes. The first is perfectly efficient, but it is objectionable, as the removal of the whole dressing is called for, even when there is neither pyrexia nor soakage in order to shorten or remove the tube. In the case just narrated I was able to extract

the tube by making an opening through the deep dressing, but this is ofttimes impossible, and it is annoying to have to uncover the wound for the purpose indicated. To overcome this difficulty Mr. Chiene proposed the use of absorbable drains formed of a number of threads of catgut which, acting by capillary attraction, would serve to remove the discharge. The suggestion was an admirable one, and I have had excellent results by its use, and in minor operations I always employ it; it is open, however, to the objection that the drain becomes absorbed before the wound is in a fit state to dispense with drainage, but with the introduction of chromic catgut this drawback will probably disappear. Horsehair drains are employed, but they, like the india-rubber tubes, are not absorbable, and are open to similar objections.

When Neuber introduced decalcified bone-tubes, prepared by immersing bones in hydrochloric acid, it seemed to me that the desideratum had been supplied, for the animal matter of which they are composed is capable of absorption, but unfortunately my experience of them does not justify me in recommending them, for in some cases they collapse too soon, while in others they remain almost unchanged for a long period. I here show you a tube taken from an aseptic amputation of the thigh twelve days after operation, and if you will examine it you will perceive that, although the end which lay in the deep part of the wound is frayed and irregular, the tube as a whole has not undergone much change; and this other one, which was extracted ten days after operation, is only superficially eroded. Now, had I permitted them to remain until their solution was complete, supposing that the changes in the tubes proceeded at the same rate during the later as it did during the earlier periods, the healing process would have been unduly delayed by their presence; and as this seems to be a common experience, although some surgeons have reported excellent results from their use, I must confess that the opinion I have formed is not a favourable one, and the results I have myself obtained do not encourage me to continue their employment.

But as I may seem to have lost sight of my text, let me lay before you the history of the case of amputation in the thigh. The disease for which the removal of the limb was put in force was extensive chronic osteo-myelitis, involving the femur and bones of the leg. In selecting the form of operation to be adopted, I was guided by the desire to leave the patient as long a stump as was compatible with the removal of the whole of the affected structures, and to obtain one which would bear the pressure of an artificial limb well. As the soft parts were not implicated, I took a long flap from the front of the knee-joint and leg, performing the operation after the manner devised by the late Mr. Teale, for which I have a decided preference when I can employ it without, as in this case, any undue sacrifice of parts, as I have found, and I have now had a considerable experience of it, that the stumps resulting from amputation by rectangular flaps, or at any rate by a long anterior flap, are far more satisfactory than is the case with any other, for the cicatrix is well out of the way of pressure, and the bone has a soft cushion on which it rests with safety and comfort. The stump was dressed on the following day, and from that time the deep dressing was left undisturbed for ten days, when union was found to be complete except at the point of emergence of the drainage-tube, which was forthwith removed, and not again reinserted. The silver wire sutures, seventeen in number, were withdrawn, as was also the stitch of relaxation. The superficial catgut sutures were, as in the previous case, mostly quite loose, but in the case of a few of them they were still attached by much attenuated loops, the absorptive process being not yet complete. The union was so perfect that I felt justified in thus removing all the stitches, although their presence was unattended by any irritative process, and leaving the stump without any support, except that afforded by the gauze dressings, which were again applied. When it was next uncovered, ten days later, it was, as you may see now, an excellent example of what may be termed a pretty stump, and one well calculated to permit of the employment of an artificial limb at no distant date. The highest temperature registered was 100·2° F. Now, gentlemen, when I tell you that this patient had been confined to bed almost continuously for six years, partly on account of angular curvature of the spine, of which she presents a well-marked specimen in the dorsal region, and partly from her sufferings from the affection for which amputation was performed, I think you must agree with me in regarding her progress towards recovery as not a little remarkable, and as I believe that the speedy union which ensued was due to rest, it should encourage you, as it does me, to follow the lines I have mapped out, in the hope that they will lead to complete union under a single dressing even in amputation of the thigh.

There is one point, and that not an unimportant one, which I have not yet spoken of—viz., sutures; and as a large number of them were required in the case just narrated, this topic may be conveniently referred to now. In this hospital you have seen that my colleagues and I almost invariably make use of catgut sutures in every variety of wound, and this we have found to be a great assistance to us in obtaining early union, for they are absolutely unirritating; and, as I have often shown you, absorption of the part of the threads lying within the wound takes place, a touch with a sponge being sufficient to remove the knots and external portions of the sutures. This use of catgut for sutures as a matter of routine is not universal, for many who have employed them have returned to silk, horsehair, and metallic sutures, as they state that they have found that absorption takes place too readily. I can only say that that has not been our experience here, for in our hands they have proved perfectly reliable retentive appliances; and as they have been in constant, and almost daily, use for seven years, we have had ample opportunity for forming a just estimate of their value. But in cases where you have a heavy and somewhat unwieldy flap to support, as in Teale's amputation, a few metallic stitches are valuable, and the employment of one or two stitches of relaxation will lend material aid in obtaining accurate coaptation of the deeper parts of the wound by which union will be favoured. The buttons which I now show you are such as I have been in the habit of employing for the latter purpose for the past five years, and as I have every reason to feel satisfied with them, I have not felt inclined to exchange them for any of the more recently suggested ones, for the fastening of the wire is both easy and secure, and tightening and relaxation can be readily achieved. In the case of stitches of relaxation the silver wire should be inserted at a considerable distance from the edges of the wound, and then the free end should be passed through the central opening of the button, and twisted round the little upright knobs which spring from either side of it. I hope to find in chromicised catgut a substitute for the wire, and by using a double thread, its fastening, and its tightening or relaxation if required, will be almost as easily accomplished as if wire were employed.

Before taking leave of the subject of amputations let me remind you that in not a few cases a splint made of sheet lead, or of some material similarly capable of being accurately moulded to the stump, will be found useful in preventing unrest, and will thus prove a valuable adjunct to treatment.

I have already occupied so much time that I must endeavour to compress the three following cases into the smallest compass.

1. Excision of the mamma for soft cancer in a patient aged seventy-three. The operation was performed on Oct. 21st. Tube removed Oct. 25th. Line of incision soundly healed Oct. 27th. Highest temperature 99·2°.

2. Ogston's operation for genu valgum. Dressing unchanged from first to last. Highest temperature 101·4°.

3. Operation for ununited fracture of tibia in its lower third. This operation, which I was recently called upon to perform in private practice, was a protracted one, occupying upwards of two hours. There was extreme displacement of the lower portion of the tibia, which was overcome with great difficulty after the tendo Achillis and the new structures by which it was connected to the upper portion had been divided. The fibula which had been fractured had united, and this added to the difficulty experienced, but I was unwilling to refracture it, as I was desirous to preserve its integrity in order that it might serve to steady the limb. After much manipulation I succeeded in uniting the ends of the tibia by means of a suture of thick silver wire, having previously removed a piece of bone from both the fractured ends. A drainage-tube was inserted, gauze dressings were applied, and an external plaster-of-Paris splint was employed to prevent movement. The wound was dressed on the following day, and again eight days afterwards. On the latter occasion the line of incision—which was about seven inches in length—showed complete union,

and the drainage-tube was dispensed with. There was not the slightest sign of inflammation, and the discharge was so trifling that I was doubtful whether I should not re-use the external gauze dressing, which was only slightly stained by it. The patient was perfectly comfortable, and free from pain after the first thirty-six hours had passed, and the only rise in temperature occurred on the evening of the second day, when it was 101·6° F. The dressings were next removed eleven days afterwards, when the protective was coated with moisture, and the opening left on the extraction of the tube was filled with healthy granulations. Three weeks subsequently, when the next exposure took place, the drainage-tube opening was nearly, but not quite, healed, and the same external dressing was again utilised.

What the ultimate result may be, so far as the fracture is concerned, it is as yet too early to foretell; but if we can perform an operation such as this—than which nothing could well be more severe,—and obtain union in the manner which occurred here with only four dressings in a period of nearly six weeks with no pyrexia and almost no pain, I think that we are justified in believing that the *vis medicatrix naturæ* is indeed all potent, and that such means are alone required as will prevent the entrance of baneful influences from without; for I need hardly tell you that in this case the result was in nowise due to the direct or stimulating influence of the carbolic acid on the tissues, but to the germicidal effects which it exercised upon the putrefactive atoms which no doubt fell upon the dressings in which it was stored. And I would say, in conclusion, that had any such record as I have now laid before you been produced a few years ago, it would have been regarded as a dream that could never be realised, or as a tale only worthy of being included among those of a surgical Munchausen.

ON PRESSURE IN WOUND TREATMENT.

BY SAMPSON GAMGEE, F.R.S.E.,
CONSULTING SURGEON TO THE QUEEN'S HOSPITAL, BIRMINGHAM.

MR. JAMES HARDIE'S clinical lecture in THE LANCET of Oct. 15th, "On the Use of Sponge Pressure as a Surgical Dressing," has recalled to my recollection a paper on the same subject published by another Manchester surgeon 111 years ago. I refer to Mr. Charles White's "Account of the Successful Use of the Sponge in the Stoppage of an Hæmorrhage, occasioned by Amputation below the Knee; and of the remarkable effects of that application in preventing the absorption of matter."[1]

In the course of his pithy paper, Mr. White expresses himself strongly in favour of dry and infrequent dressings, and concludes with these words, "The sponge keeps down fleshy granulations, partly by a removal of that matter in which they would be constantly soaked, and partly by a compression the most easy and equal that can possibly be imagined, from the natural elasticity of the sponge."

Mr. White owned himself a follower in this treatment of Mr. Kirkland, who read a paper, "On the Use of a Sponge after Amputation," before the London Medical Society, May 5th, 1760. He therein speaks of the "absorbent and compressing action of the sponge," and thoroughly understood how; "a moderate pressure promotes a reunion of the parts by preventing swelling and consequent suppuration." Dr. Kirkland, jun., has recorded that, "in 1761 John Hunter before going with the army to Belleisle was desirous of trying Dr. Kirkland's discovery relating to the use of the sponge."[2]

Amongst the moderns, Mr. James Syme was foremost in advocating the use of sponges in the treatment of incised wounds. He teaches that, "in wounds of considerable depth ..... the dressing should be applied with a view rather to compress the sides of the cavity than to close its orifice. ..... Compresses of dry lint or other bibulous material must be carefully employed to retain the raw surfaces in due position, without impeding the discharge of blood or serum. One or more soft and moist, and carefully squeezed sponges, I find extremely convenient for this purpose. ..... I have by this means obtained union by the first intention, when it could hardly have been expected. In amputation at the ankle-joint, I have in like manner experienced great advantage from a hollow sponge sufficiently large to receive and contain the stump."[3]

In the hands of a very careful surgeon sponges may be used with safety; but it is quite conceivable that the difficulty of cleansing them thoroughly may have proved a source of foulness and its attendant evils, and may explain the abandonment of the use of sponges, by all except a few surgeons. I hold that absorbent and elastic wound dressings, so favourable to drainage and compression, should be burnt after use; and I know of no such dressings more cheap, handy, and efficient than the absorbent and antiseptic gauze and cotton pads prepared on my suggestion by Messrs. Southall Brothers and Barclay of this town. But whatever the material used, whether oakum or tenax, sawdust or earth, tow or stypium, salicylic silk or cotton, sponge or pads, is only a question of practical detail. The governing principle is the same. Dry and infrequent dressing, immobility, and pressure are the essentials of wound treatment.

The discussion on Wound Treatment at the recent International Congress is destined to be historical. Its full import will only appear when the Transactions shall be published in full. In the remarkable leader commenting upon it in THE LANCET[4] occurs the statement that "in the main the old classical principles were reasserted." It was because they are as true as the natural laws of which they are the outcome.

[1] Cases in Surgery, with Remarks. Part I. By Charles White, F.R.S., Surgeon to the Manchester Infirmary. London, 1770. P. 151, et seq.

[2] An Appendix to an Inquiry into the Present State of Medical Surgery by the late Thomas Kirkland, M.D. With Preface, Notes, &c., by James Kirkland. London, 1813.

[3] Contributions to the Pathology and Practice of Surgery. By James Syme. Edinburgh, 1842. Pp. 77-8

[4] Sept. 3rd, 1881, pp. 423-5.

THERAPEUTIC MEMORANDA.

BY MATTHEW CHARTERIS, M.D.,
PROFESSOR OF THERAPEUTICS, UNIVERSITY OF GLASGOW.

THE following points connected with the use of remedies have been collated from the reports of my last three assistants in the Royal Infirmary—Dr. A. Macpherson Laurie, Dr. E. Cook, and Mr. William Laurie. The cases were clinically lectured upon in the following order:—

1. *Syphilis treated by injections of perchloride of mercury.*—This method was adopted in two well-marked cases of secondary syphilis in females. In both there were condylomata, and in one iritis. The injections at first consisted of solutions of the perchloride in glycerine and water. A grain was dissolved in one hundred minims of glycerine and water mixed in equal proportions, and of this from four to seven minims were injected twice daily. This method was, however, found to be unsatisfactory, for it caused on application considerable pain, and was succeeded by an erythematous blush, upon which developed a pustular sore. A much better vehicle for the administration of the mercury consisted in dissolving two grains of the perchloride in sixty minims of water. To this solution was added forty minims of a filtered mixture of one part of white of egg and two of water. The albuminate of mercury thus formed was rendered soluble by the addition of a small quantity of a saturated solution of chloride of sodium. Of this three minims were injected twice daily. Little or no pain was experienced by this method, and no sores followed. After a continuance of seventeen days the eruption disappeared without any salivation or other digestive derangement. A mixture of iodide of potassium was subsequently ordered, and there was no reappearance of the eruption in either case nine months after the patients had left the hospital.

2. *Conium baths in eczema.*—Two cases were treated by these baths, and the results were found to be excellent. In the first case—a young man aged twenty—the complaint had lasted for eight months, and the legs and arms were covered with a leeting angry red eczematous rash. The itching was intense, and various local applications which were used failed in any way to relieve this. A month after admission two handfuls of conium leaves were placed in a tepid bath, and the patient was ordered to lie in this for twenty minutes. The result was satisfactory. The same night the patient slept well. The baths were continued for a week, and at the expiration of that time scales began to form, and

the itching entirely disappeared. In another week he was dismissed with his skin whole.

In the second case the eczema was of three weeks' duration. The redness on the arms and legs was very marked, and the itching was described by the patient as being intolerable. He was immediately ordered a bath similar to the one previously mentioned, and the same relief was experienced. It was continued for a week, and the man was dismissed completely recovered in fourteen days. He complained on one or two occasions of a numb feeling followed by tingling after having used the baths. In giving the conium baths it is advisable to cover the bath with oiled silk, leaving the head bare. In this way there is no chance of headache from the inhalation of the conium vapour.

3. *Nutrient enemata in gastric ulcer.*—This affection is not unfrequent among servant-girls and mill-workers in Glasgow, the symptoms on admission, as a rule, being failing health, great debility, and vomiting of food, with pain in the epigastric region. The food taken is generally vomited after it has remained half an hour in the stomach, and there is a history of hæmatemesis. The bowels are usually constipated.

After a day's rest, and a thorough diagnosis has been made, nutrient enemata seem most advisable, and are now usually prescribed by me. For this purpose, the nurse is ordered to place one pound of beef, cut small, in a jelly can, and then allow it to simmer in a saucepan filled with boiling water for two or three hours. This extract is then mixed with a pint of water, and one-half is injected in the morning and the other in the evening. These enemata are continued for seven, eight, or nine days, the only thing administered by the mouth being a little ice occasionally, and for the last three days of the treatment this is combined with champagne—a pint lasting two days. There is then a cautious return to food, beginning with barley-water and milk. In the course of from fourteen to twenty-one days the patients are convalescent, and are allowed to go about and partake of the usual hospital diet. Five grains of nitrate of bismuth are usually given them thrice daily. I consider this plan of treatment infinitely superior to any other I have tried, and it seems to promote cicatrisation of the ulcer, and causes no undue irritation of the affected spot.

4. *Injection of apomorphia in chronic bronchitis.*—This method was tried last year in two cases, one-twentieth of a grain of apomorphia being injected. This had the effect of producing efforts at vomiting, but nothing was thrown up. There were also great yawning and some perspiration. Sleep always came on within an hour of the administration, and this was natural to appearance, and associated with no stertorous breathing. On awakening in the course of an hour or two the breathing seemed relieved, and there appeared to be less clogging of the air tubes. On two occasions one-twelfth of a grain was placed on the tongue. This caused no nausea or retching. I intend to try this method of treating chronic bronchitis and emphysema further during this winter, as it seems to be a powerful and useful remedy.

5. *Hypodermic injection of quinine.*—For injection the following solution was made: thirty grains of sulphate of quinia, fifteen grains of tartaric acid, and half an ounce of water. Twenty minims of this were injected every two hours in a case of intermittent fever. The patient had been resident for some years in the West Indies, and when there had several times ague. He stated that he knew when it was going to recur since he returned to this country, and that he had been ordered to take quinine. This, however, always occasioned vomiting, and he was obliged to desist, and endure the fever, which lasted forty-eight hours. The injection which was given caused no pain, and it was followed by no abscesses. It seemed to have the effect of warding off the attack, according to the man's statement. On several occasions this method of administering quinine has been tried. I can testify as to the pain being *nil*, and to the absence of any inflammation. Dissolved in any other acid, quinine is a painful and troublesome agent, and its use cannot be recommended. In cases of typhoid fever I would not hesitate to use it hypodermically, and should fancy good results would ensue, both in reducing the temperature and in preventing any derangement of the digestive organs apt to be induced by large doses given by the mouth.

6. *Chorea treated by arsenical solution.*—The worst case of chorea I have seen occurred during last winter. The patient, a girl aged twelve, was suffering from rheumatism, and she was taken into a house adjacent to her mother's to see a woman who had died. The same night involuntary twitchings of her body were observed, and these increased in severity to such an extent that three days afterwards, on her admission to the hospital, she was unable to remain quiet for even a few seconds. It required three nurses to take off her clothes, so frequent and so violent were the movements. When placed in bed she rolled about from side to side, and required continuous and careful attention. On attempting to give her liquid food, it was ejected by the constant motion of the tongue; and only at intervals, when the movements were less pronounced, was any retained, and that was effected simply by watching an opportunity and pouring the contents of a spoon into the mouth. She was utterly unable to walk or stand. A cardiac murmur was heard after the first sound of the heart. Arsenical solution was given at first in three minims, and latterly in seven minims, daily. In the course of a week improvement was manifested, and when the constitutional symptoms of the drug three weeks afterwards showed themselves, the convulsions entirely ceased. The murmur remained.

7. *Artificial Hunyadi Janos water.*—The natural Hunyadi Janos water was observed to be an efficient, safe, and agreeable purgative in many chronic cases. It is, however, found to be too expensive for hospital use, and it was resolved to try it artificially. At first it was made according to Liebig's analysis of the natural water, but this was perceived to be too weak, and it failed to produce purgative action. Ultimately it was made thrice the given strength, according to the following recipe:—Sulphate of magnesia, 514·92 gr.; sulphate of soda, 519·54 gr.; sulphate of potash, 2·76 gr.; chloride of sodium, 39·15 gr.; bicarbonate of soda, 15·60 gr.; water, 16 oz. Dose, two ounces and upwards. It will be observed that the chloride of calcium is omitted, but the proportion is so small that even when it was included there was no difference in the action. This inexpensive mixture, made for a penny per quart, can be effectually recommended. It will be found to possess every advantage attributed to the natural variety, the necessity for buying which seems to be done away with.

8. *Unilateral inunction of chrysophanic acid.*—Cases of psoriasis have been treated in my own and other wards in the hospital by this method, and I am now satisfied that the acid applied in the manner and proportions indicated in THE LANCET will have the effect of causing the complete disappearance of the patches. Apart from the peculiarity of the action of the remedy so applied, it is probable that the thorough saturation of the system may have the effect of preventing a recurrence of the eruption. It is more likely to do this than when its merely local action is trusted to.

THE TREATMENT OF EMPYEMA.

By W. B. CHEADLE, M.D., F.R.C.P.,
PHYSICIAN TO THE HOSPITAL FOR SICK CHILDREN, GREAT ORMOND-STREET; SENIOR PHYSICIAN TO OUT-PATIENTS, ST. MARY'S HOSPITAL.

(Concluded from page 787.)

As the practical outcome, then, of my experience of the treatment of empyema I would venture to lay down the following rules:—

1. *To ascertain the character of the fluid.*—If pleuritic effusion is accompanied by high temperature, and the rise persists for upwards of a week, or if the fluid does not subside satisfactorily at the end of three weeks, even if there be no continued rise of temperature, ascertain whether pus be present or not by means of an exploratory puncture. This is best made by a hypodermic syringe, after the manner advocated by my friend and colleague Dr. Barlow. The hypodermic syringe must be of sufficient calibre to allow the passage of pus freely, and its capacity in this respect may be tested by the passage of carbolised oil, with which it must be thoroughly disinfected before use. I have seen errors in diagnosis arise from the imperfection of the syringe, and its failure to extract pus when abundantly present.

2. *The removal of pus.*—If pus be found, remove it at once. About this there cannot, I imagine, be two opinions.

Draw off the pus in the first instance with a carefully carbolised aspirator. This gives immediate relief, the patient improves at once in general health, and gains strength for the more serious operation of a free opening should it become necessary. Then after an interval of four or five days, if the amount of fluid be large, make a free opening without delay. Repeated aspirations when the fluid reaccumulates rapidly in large quantity are utterly inadequate to cure, and are disastrous in the end, for the fluid eventually becomes foul in spite of all precautions. If the amount of fluid be small and the empyema clearly a limited one, ascertain the continued presence of pus by the hypodermic syringe, and then draw it off by aspiration a second time. This may be repeated if the temperature keeps down, and there are no signs of large accumulation. For it has been shown that one or two aspirations will frequently suffice for the cure of a limited empyema; while, on the other hand, a large one will certainly require a free opening in the end, and the sooner the pus is let out freely the better.

3. *Position and character of the free opening.*—If it be decided to make a free opening the best position for it, I am convinced after many experiments, is the one originally selected by Trousseau—viz., the sixth or seventh intercostal space in the axillary line. It has been objected to this that it is not the best position for free drainage, and that, as the chest falls in, the proximity of the ribs to one another at this point causes them to press upon the drainage-tube, disturb it, and make the ribs liable to necrosis. With regard to the first objection, I may say I have never seen any practical difficulty in emptying the pleura from this point; and as to the second, although it has some force, yet the difficulty is not insurmountable, and the evil less than many attending other situations. The adoption of the intercostal space immediately below the angle of the scapula, for example, which has been strongly advocated, is, in my experience, usually followed by swelling and suppuration, and often by local abscesses, due, I imagine, to injury of the muscles there, with the friction and heat and pressure, caused by the patient lying on his back. From these drawbacks the axillary position is free. Further, experience has taught me to be content with a single opening. Under proper management this gives perfectly free and sufficient escape to the pus, and the shock of the protracted and severe double operation—a formidable one in the case of young children—is avoided. The cases in which I have caused a double opening to be made have done badly throughout. The wide openings and counter-opening advocated by some authorities are dangerous to little children, who bear such free rough usage ill. This method admits of a larger application to adults, but with children it is only admissible in extreme cases of large foul accumulations.

4. *Antiseptic paracentesis and dressings.* — The results of full antiseptic precautions during paracentesis and dressing afterwards have been disappointing. They were adopted in three cases, and all of them ended fatally. In one case only did the discharge show any sign of becoming foul, but the children did badly and died, two of meningitis and one of peritonitis and pneumonia. Whether the patients became carbolised by the frequent use of spray, or whether, on the other hand, the dressings were not repeated with sufficient frequency (every second and third day), to preserve the absolute purity of the pleural cavity, or the tube became obstructed by accumulating débris, I have been unable to determine. But whatever the explanation of the failure may be, the results were so unsatisfactory that I have ceased to require more than the use of carbolised instruments, and dressing with carbolised tow, as precautions against contagion from without, the dressings being changed twice daily.

5. *Washing out the cavity with astringent or antiseptic liquids.*—Formerly, guided by the authority of Trousseau, I diligently used solutions of iodine, and subsequently of carbolic acid, with the view of lessening the discharge and preserving it from foulness; but my own observation has slowly convinced me that these things tend rather to increase the discharge than to reduce it, and set up fever and constitutional disturbance. In cases of foul secretion some means of the kind must be adopted, and an enlarged opening into the pleura, with free irrigation, may become necessary. But in ordinary cases I am very sure that such interference is most mischievous, and that the less the pleural cavity is meddled with in this way the better. I have seen more than one patient suffer from the *nimia cura medici* in this direction.

6. *The form of drainage-tube.*—The best form of drainage-tube is, I think, a modification of Baker's india-rubber tracheotomy tube. The flange prevents the loss of the tube into the pleural cavity—an accident which has happened more than once with a portion of common tubing; once, perhaps more often, this has led to a fatal result.

7. *The vital importance of unimpeded escape of pus.*—The one essential point of supreme importance in the management of an empyema into which a free opening has been made — of more importance than antiseptic opening, or dressing, or any other device—is the securing of *constant, unintermitting, free evacuation of pus from the cavity.* It is remarkable how the retention of pus for only a few hours sends up the thermometer. Over and over again, warned of some mischief by a rise of temperature and access of febrile symptoms, I have found the drainage-tube, ascertained to be free a few hours before, blocked by a plug, or by a kink or twist, or the impinging of its inner extremity against the pulmonary or costal pleura, or some other cause preventing free outflow. This remedied, the temperature falls, and all goes well again, as unimpeded discharge is re-established. In order to guard against this difficulty I am in the habit of directing the house-surgeon and ward sister to examine frequently during the day and night, and note whether the tube be freely open. In the early stages a satisfactory index of patency is afforded by the noise of the ingress and egress of air through the opening as the patient breathes. The temperature should be taken every four or six hours, and a rise of even one degree above normal must be regarded as a warning to examine whether obstruction to outflow be not the cause of it. It is impossible to exaggerate the importance of these precautions. The maintenance of free outflow appears to afford protection against absorption of morbid material, probably by promoting the removal of older decaying secretion from contact with the absorbents. Immunity from such recurrent poisonings, slight though they may be, must, and does, tell favourably upon the result.

8. *Avoidance of contagion.*—Patients with empyema in which free openings have been made appear to be as susceptible to infection as puerperal women. Every precaution should therefore be taken to guard them against it.

9. *The use of drugs.*—With regard to treatment by drugs I have little to say, except by way of warning against their too free use. As remedial agents they play no important part, and it is a mistake to nauseate patients with cod-liver oil to improve nutrition, or with salicylic acid, or large doses of quinine, to bring down temperature. Astringents, or bismuth with opium, are useful, and even necessary, to control the diarrhœa, which is often very troublesome and exhausting; and tonics, with nourishing diet and, perhaps, wine, are valuable adjuncts.

10. *Change of air.*—The one therapeutic agency which next to the removal of the purulent fluid possesses great power for good in these cases is change to fresh pure air. I constantly find that patients who linger on for weeks in a stationary condition with chronic discharge, neither better nor worse, improve immediately on removal to the Convalescent Hospital at Highgate, and return in a very short time absolutely well. I remember especially one poor boy who, owing to temporary closing of the Highgate wards, could not be removed there, and remained for months in Great Ormond-street, half cured, but gaining no ground, and with a persistent chronic discharge which threatened ultimate mischief. At last the opportunity came, and he went to Highgate, to return in a very few weeks perfectly well.

The singular success too which attends the treatment of empyema in children in private practice, as compared with that in hospitals, is very significant. It is due partly no doubt to the fact that such cases are discovered and treated early, whereas a large proportion of those which come into hospitals are of long-standing, having been neglected because disease has been overlooked or mistaken, and the patients more or less broken down by the persistent illness. But the more favourable hygienic conditions by which private patients of the better class are surrounded have an important influence also, while the many dangers to which hospital patients are exposed, in spite of all precautions, from the aggregation of sick persons, and intercourse with the contagious and unclean from outside, are obvious. It is a question how far cases of empyema in hospital should be further protected by isolation and special hygienic advantages.

CONTAGIOUS PNEUMONIA.

BY FREDERICK H. DALY, M.D.

I WISH it to be clearly understood that in giving the above title to this article, I by no means consider it as *proved* that there is a distinct variety of pneumonia which is contagious, say, as measles is contagious. It was necessary, however, to give the paper some title, and the name I have chosen will express what I wish to convey as well as any other I could think of. I start with the admission that the subject is at present *sub judice*. I wish also to be understood as using the word "contagious" as synonymous with "infectious."

Now, let me at once explain what I understand as contagious pneumonia. I do not at all mean septic epidemic pneumonia; I do not mean a blood-poisoning from—say, an insanitary state of a house or neighbourhood; nor yet do I mean the so-called diphtheritic pneumonia. What I am about to discuss is this, whether there exists a variety of pneumonia beginning with rigors and high temperature, and communicable from person to person, as in small-pox, measles, and scarlet fever. Having brought forward such evidence as I have at command, I must let the reader form his own opinion as to how far I have proved my case.

I will now briefly refer to my cases. In October, 1879, Mrs. H—— consulted me about one of her children who had been unwell for three days. She called at my house to tell me of the child's state, so I did not see the case. She informed me that the child had at first been shivering and sitting over the fire and then got burning hot, and had incessant cough. I prescribed some simple diaphoretic medicine, ordered a linseed poultice to the chest, and directed the mother to send for me the following morning if the child was no better. I was not sent for the next day, but I learned subsequently that the child remained in the same state for several days, and then seemed to get quite well. Nine days after I had prescribed for this child, as above stated, I was urgently summoned to visit two of the other children of this lady. I may remark that she had five children. I found the children in two separate cots in the day nursery. This was a large and lofty room, having three large windows. The mother had brought them into this room in order that she might herself take charge of them, and not trust them to the care of their nurse. She had also with her in this room the child that had been first taken ill and two others that were apparently quite well. I found the two children that I had been called in to see suffering from acute pneumonia. The elder, a child aged seven years, had consolidation of the left lung from apex to base behind, while in front there was crepitation under the left clavicle, and lower down lung consolidation; there was, in fact, inflammation of the left lung from apex to base, both in front and back. The temperature was 104·2°, rapid pulse, and constant hacking cough. The second child had inflammation of the right base, with a temperature of 103·8°, quick pulse, and incessant cough. I omit all details of these cases. They were typical of acute pneumonia. It is sufficient to state that they both progressed favourably and terminated in seven or eight days in a well-marked crisis, the temperature falling to normal and recovery being complete. I was struck by the remarkable occurrence of two cases of pneumonia simultaneously in the same house, but I had then no suspicion that it was anything more than a coincidence. I had not examined the child that was first taken ill. During the first three days that these children were ill their mother never left them day or night; she had a chair bedstead in the day nursery upon which she slept. On the fourth day of their illness when I called I was informed that the mother herself was taken ill that morning, and had been obliged to go to her own room to bed, and that also her youngest son was very unwell. I found Mrs. H—— in bed. She had had a rigor; her pulse was 128, temperature 104·6°, tongue coated; she was continually coughing, but there was no expectoration, and she complained of a violent pain under the left breast. I could find no physical signs indicative of pneumonia, but had no doubt that that disease was developing itself. I examined the youngest son. His temperature was 105°, and he had acute inflammation of both lungs. He was very ill indeed; on my second visit, in the evening, I thought the child would die during the night. He had consolidation of the left lung behind and in front, and there was fine crepitation at the right base also. I may dismiss this case by saying that, happily, the little patient recovered after a prolonged illness. Indeed, even now he is delicate, and takes cold on the slightest exposure. My attention was now directed to the extraordinary fact that, in the same house and within a few days, there had occurred in this family four undoubted cases of pneumonia. I now examined the first child that had been seized with illness, and the left lung behind gave, on physical examination, evidence of recent lung consolidation, and the history of the child's illness, the sudden improvement from being so ill, the fever, the cough, every symptom clearly indicated that this was the first case of pneumonia in the house, and, if my hypothesis be correct, the source of the contagion and the starting-point of the four subsequent cases. Let me return now to the case of Mrs. H——. She went on badly; there soon developed fine crepitation all over the left chest behind, and also in front; this passed rapidly into consolidation. Then there was crepitation at the right base, and the temperature continued between 104° and 105°. Dr. Herbert Davies saw this patient in consultation with me. There was at his visit complete dulness over the left lung both in front and back, and tubular breathing, also considerable crepitation in the right lung. Her colour was getting bad, the lips slightly blue. She died during the night.

This patient's mother, aged sixty, came to nurse her daughter from Wood-green; she was a remarkably healthy-looking woman. The evening after her daughter's death she was taken suddenly ill. She had a well-marked rigor. I saw her soon afterwards, and her temperature was 105·2°. The next morning there was fine crepitation at both bases, the temperature was 104·8°, and there was great dyspnœa. She continued in much the same state during the day and following night. Dr. Herbert Davies also saw this case with me, and confirmed my diagnosis, as in the former case; but his large and ripe experience was unable to suggest anything which could stay the fatal progress of this case. She began to get livid late in the afternoon, and died in the course of the night—exactly six days after her daughter.

I do not think there can be any doubt that there had been in this house six cases of pneumonia, two proving fatal, in about a fortnight. The question now arises, What was the exciting cause of all this disease? What was the starting-point? I confess I was quite at a loss for an explanation. I had never heard then the term contagious pneumonia. But the name at once suggested itself to my mind as conveying the probable etiology of my six cases. I examined the text-books, but could find no mention of such a variety of pneumonia. Even the exhaustive article on this disease in Reynolds's System of Medicine, by Dr. Wilson Fox, afforded me no help in coming to any satisfactory conclusion. It was certain that some of the exciting causes of pneumonia were not present. There had been no chill, as far as I could learn, in any case; nor had there been any prolonged exposure. There was no reason to suppose that the disease was that variety of pneumonia described as epidemic, and which has been associated with general insanitary conditions, such as overcrowding and bad ventilation. The pathogenesis of pneumonia is uncertain, and my cases supported the theory that this disease is a specific fever, of which the lung disease is only the local effect. My cases exactly resembled, in their mode of attack (case following case) and progress, some zymotic disease, contagious from one patient to another. I wish to make it clear that the sanitary state of the house was most carefully investigated. The drains, the closets, the sink, the cisterns, the water-supply were all completely examined and found in excellent working order, so that there was no common blood-poisoning from any insanitary state of the dwelling. I have before said that the nursery was large and well ventilated; so was the entire house. It is important also to observe how the disease spread. There were three servants in the house; they were but little in the sick rooms; they escaped the disease. The same applies to Mr. H——, while four of the five children that were constantly together all took the disease; so did the mother, who never left them until she herself was seized with the malady, and so also did Mrs. H——'s mother contract the disease, and she was continually at the bedside of her daughter until her death. I ask, then, if this was not contagious pneumonia what was it? Was it measles without rash? It certainly was not, because, in the first place, there were not present the characteristic catarrhal symptoms,

and, secondly, the shortness of the incubation quite negatives measles. Supposing, then, it to be a contagious form of pneumonia, one must directly admit what a rare disease it is. But I do not think we must on this account alone reject such evidence as can be brought forward. Addison's disease is rare; Hodgkin's disease is rare also, and thousands of medical men in extensive practice never see either. Typhus fever is almost unknown to the medical men in this part of London. We do not, however, deny that these diseases exist. All that can be said is that the contributing conditions necessary for the production and spread of these diseases, whether in the body or without the body, or both, are rarely present. May we not argue the same with regard to contagious pneumonia? Some special but unknown constitutional predisposition, together with some zymotic influence, may be necessary for the production and propagation of a variety of inflammation of the lungs distinctly contagious. Possibly the disease is often overlooked or mistaken. Everyone knows that there is a bovine disease, pleuro-pneumonia, which is highly contagious, and which spreads from beast to beast by means of the pus and epithelium cells of the sputa passing into the air-cells of healthy animals. Why may not the same happen occasionally in man? I can see no reason why it may not. A medical friend has called my attention to a paper by Mr. Wynter Blyth, in THE LANCET, vol. ii., 1875. It strongly supports my view that there is a contagious form of pneumonia. I must refer the reader to this very interesting paper; I shall, however, make one quotation from it: "A farmer at Bow (North Devon) was affected with acute pneumonia, and was nursed during his illness by his niece. His niece became affected with the same disease and carried it to her husband. In another case, an old man, affected with pneumonia, reposed on an affectionate relative's breast during a great part of his fatal illness. The relative was very shortly afterwards affected with the same ailment." Mr. Blyth relates several such cases which were certainly contagious, and he mentions that Dr. Christian Budd and others have had similar experience. He sums up thus, "So that as scarlet fever determines to the skin, typhoid fever to the bowel, hydrophobia to the spinal cord, the pneumonia germ culminates in the pulmonary tissues." My cases support this view, and I believe that future observations will further confirm it. It is now generally admitted that certain forms of phthisis are contagious. The observations of Dr. Reginald Thompson and others have fairly established this. Dr. Thompson, in THE LANCET, Nov. 6th, 1880, writes, "Fifteen well-marked examples of this kind (infective phthisis) have come under notice out of something like 15,000 cases of phthisis; hence it is easy to understand why observers with a small number of cases should disbelieve the possibility of contagion." Sir Thomas Watson, in the third edition of his classic work, "The Principles and Practice of Physic," says, "Is phthisis contagious? No, I verily believe it is not." Most men, if asked the same question now respecting pneumonia, would answer in a similar negative. I am inclined, however, to give an affirmative answer to this question with respect to some forms of pneumonia. It was reported in the newspapers last year that Mr. Serjeant Parry had died of acute pneumonia, and within a week his wife, who had nursed him, died of the same disease. Does not this look like contagious pneumonia? I know nothing of the particulars of these cases. I only take the newspaper accounts. Taught by the experience I have gained in the foregoing cases, I believe that I have previously met with cases of contagious pneumonia in my practice, but have not recognised them as such. We know how readily other diseases are conveyed through the naso-respiratory mucous membrane; epidemic influenza, for instance, and this very disease has certainly a tendency to give rise to pneumonia. See, again, how the effluvium from grasses (especially anthroxanthrum odoratum) produces summer catarrh or hay fever in many persons. Whooping-cough is also a remarkably contagious disease. I have endeavoured to prove that certain forms of pneumonia may also be contagious; how far I have succeeded I must let others decide. I shall be content if I get men more competent than I am to direct attention to this subject. We know that certain forms of blood-poisoning can produce pneumonia. Such as albuminuria, erysipelas, and measles most probably. I ask is there still another cause of the disease not generally, if at all, recognised—viz., direct contagion?

Hackney Downs.

PHTHISIS AS AN INFECTIOUS DISEASE.

BY ALEXANDER M. McALDOWIE, M.D.

A REVIEW of the history of medicine shows that attempts have been made from time to time to class pulmonary consumption amongst the infectious diseases. Experiment and theoretical reasoning have been brought forward to prove that the disease is spread chiefly by contagion, whilst the results of clinical study have invariably been directly contradictory to this doctrine. The researches of Wilson Fox, Burdon-Sanderson, and others, which have established the communicability of tuberculosis by inoculation, have not materially altered the opinion of the profession upon the contagiousness of phthisis. This has, however, been recently revived by the powerful advocacy of Professor Cohnheim. Previous to the publication of his paper the prevailing opinion amongst medical men on the subject was expressed by Ruehle as follows:—"Even at the present day it is commonly supposed that the disease may be communicated through the intimate relation existing between husband and wife, and although it is difficult to adduce satisfactory evidence upon the point, we may be permitted to agree with Laennec and Andral, that caution and cleanliness in taking care of and associating with those who are far advanced in consumption are certainly desirable." Dr. Crisp stated several years ago his opinion that it was highly contagious amongst certain of the lower animals. On the other hand, out of a total of 670 cases recorded by Flint, only five show the possibility of the disease being communicated from the husband to the wife, or from the wife to the husband. Flint concludes that "they do not furnish facts sufficient to render the communicability of phthisis probable."

I have, during the past four years, been making observations on over four hundred patients suffering from phthisis treated in the wards of the North Staffordshire Infirmary, on several hundred others attending as out-patients, and on those occurring in private practice, for the purpose of detecting cases in which it was probable that the disease had originated from infection by inhalation. The subject is one which presents peculiar difficulty in investigating, on account of the impossibility, in many cases, of obtaining a correct history of the origin of the malady, or of accepting the patient's statement as to the presence or absence of tubercular antecedents. I have been able to find four cases where the wife, previously healthy, and with no family history of tubercular disease, became affected whilst attending to her phthisical husband. The ages of the patients in these four cases varied from thirty to forty-four years. All the patients suffered from the tubercular form of phthisis. But the following two cases, where the pneumonic form of consumption appeared to communicate the disease to a healthy person, are worthy of individual record.

P. M——, aged eighteen, an ironmonger, always strong and healthy, and with no family history of tubercular disease, was attacked with catarrhal pneumonia after the exposure to cold and wet produced by falling into a river. Rapid phthisis followed, and he died after six months' illness. His brother, eighteen months his junior, who occupied the same bed with the patient till within a few weeks of his death, became affected with tubercular phthisis soon after his decease, and died about three years subsequently. The only remaining member of the family, a brother, two years younger, is at present quite strong and healthy.

A. L——, aged forty-six, a bookseller, was attacked with catarrhal pneumonia after exposure to cold. Pneumonic phthisis was afterwards developed, and he died nine months after the commencement of the disease. Before his death his wife exhibited symptoms of pulmonary tuberculosis, to which she succumbed about two years after her husband's death. Both patients had previously enjoyed good health, and in neither case was there any family history of tubercular disease.

With regard to tubercular affections of the abdominal viscera, it is now universally admitted that they may and often do originate from specific germs introduced into the alimentary canal in the same manner as typhoid fever, cholera, and some other infectious diseases. The germs enter the body

with the ingesta, and are absorbed by the lymphatic follicles of the small and large intestines, where they exercise their specific effects. The stomach is protected by the acidity of the gastric juice, and the œsophagus by the rapid passage of the food. It being admitted that tuberculosis may be communicated from the diseased to the healthy subject, it remains for us to determine in what manner the system is protected from infection during ordinary intercourse with phthisical patients. The changes of the air effected by respiration take place in the alveoli of the lungs after the air has traversed a complex system of tubes. These are lined by mucous membrane, the surface of which is covered by vibratile ciliary epithelium, and moistened by tenacious mucus which is secreted by mucous glands occupying the spaces between the cartilages, and also, in the larger tubes, the inner surface of the cartilaginous plates. But when the air has reached the alveoli, physical changes have already taken place during its passage through the bronchi. Professor Lister states:—"I have explained to my own mind the remarkable fact that in simple fracture of the ribs, if the lung be punctured by a fragment, the blood effused into the pleural cavity, though freely mixed with air, undergoes no decomposition ..... Why air introduced into the pleural cavity through a wounded lung should have such wholly different effects from that entering directly through a wound in the chest was to me a complete mystery until I heard of the germ theory of putrefaction, when it at once occurred to me that it was only natural that air should be filtered of germs by the air passages, one of whose offices is to arrest inhaled particles of dust, and prevent them from entering the air-cells." When particles of carbon are dusted on the mucous membrane of the œsophagus of a frog, we see them propelled towards the stomach by the vibratory action of the cilia. It is probable, then, that any tubercular germs which might be inhaled during close attendance on phthisical patients would in like manner be arrested by the cilia, and removed from the air tubes by expectoration. Although these germs would come in contact with the mucous membrane of the bronchi and trachea, the chances of their absorption would be slight. Lymphatic vessels are abundant, especially on the internal layer of the bronchi, but there are no lymphatic follicles as in the intestinal mucous membrane. That the trachea and bronchi are not readily attacked by tubercular matter is evident from the comparative rarity with which tubercular ulceration of their lining membrane is found during the early stages of consumption. Moreover, Morell McKenzie, in speaking of laryngeal phthisis, states decidedly that it is not due to the corrosive action of the sputa. Animals, indeed, are readily rendered tuberculous by the forcible inhalation of tubercular sputa in spray. The motor power of the cilia has also been forcibly overcome by the inhalation of an atmosphere highly charged with carbonaceous particles. But it is impossible that a concentrated atmosphere of tubercular germs, such as are used during these experiments, should be met with in ordinary contact with consumptive patients. Further, the germs which float in the air are not moist, as in the above experiments, and it is well known that the infective power of dry germs is feeble compared with that of moist. The lungs are liable to infection only when the inhaled germs have escaped the filtering action of the bronchi and reached the air-cells. Here they come in contact with a surface highly favourable for their absorption. The lymphatics of the alveoli commence in small anastomosing lacunæ destitute of proper coats, situated in the fibrous alveolar wall; the larger trunks run in the direction of the elastic fibres, and subsequently follow the course of the capillaries, yet not so strictly but that they frequently cross the latter, and form large lacunæ in their meshes (Schulze). The columnar ciliated epithelium which lines the bronchi is here replaced by a layer of cubical non-ciliated cells. The absorptive power possessed by the air-cells of the lungs is great, and has only been thoroughly recognised of late years. I have seen a pneumonic exudation, which occupied the whole of the lower lobe of the left lung, entirely removed by absorption in six days, only two or three drachms having been removed by expectoration. The parts of the alveoli most exposed to the attack of inhaled germs are those near the entrance, at the points where the small bronchial tubes lose their cylindrical character and become covered on all sides with the cells. And pathological observation has proved that these are frequent starting-points in phthisis. Rindfleisch states, "The first lesion in pulmonary phthisis is a tuberculous infiltration of all the angles and projections situated at the points where the smallest bronchioles become continuous with the acini. In this way circumscribed white nodules are formed, which we will call, after Laennec, tubercle granula." It is conceivable that the development of these tubercle granula is due to the transmission of infective germs by the bronchi during inspiration, and that the germs may be inspired during intercourse with consumptive patients, or from other parts of the lungs in those already affected with phthisis.

The special liability of the apices of the lungs to tubercular disease is not opposed to the theory of infection by inhalation. Pulmonary diseases which are produced by inhalation of dust invariably begin in the upper and posterior parts of the lungs as the air first enters these portions during inspiration. The inspired particles are therefore more likely to reach the alveoli than in other parts of the lungs. Moreover, as Ruehle remarks, owing to the anatomical peculiarity of the apex, forcible expirations drive the air into this part, and anything which has found its way into the bronchioles of this region has less prospect of escape and more of retention, decay, and decomposition than in other parts of the organ.

Stoke-on-Trent.

TREATMENT OF PHTHISIS BY INHALATION.

BY S. MACAULAY, L.R.C.P.ED., L.F.P.S. GLAS.,
ASSISTANT-SURGEON TO THE NEWCASTLE THROAT AND EAR HOSPITAL.

IN a number of cases of phthisis that have come under my observation and treatment during the last few months I have recommended the use of Dr. Sinclair Coghill's respirator and antiseptic solution. All the cases were those of decided phthisis, and were all gradually getting worse up to the time of this treatment being adopted. The symptoms that were most relieved are best illustrated by the following case.

Mrs. D——, aged thirty-nine, about a year and a half ago was seized with an attack of hæmoptysis, preceded by a troublesome cough, which has continued without intermission ever since. She had night sweats, occasional diarrhœa, and was a good deal emaciated. During the week preceding the use of the respirator her expectoration was very profuse and purulent. Four weeks ago she obtained one of Dr. Coghill's respirators, and a solution containing ethereal tincture of iodine, carbolic acid, creasote, and rectified spirits, of which she dropped ten minims into the respirator, and then wore it for half an hour morning and evening. In the course of a few days, when I saw her again, she informed me that she only expectorated about a third of what she formerly did, that her cough was much less frequent and troublesome, and what she considered best of all, that she could now breathe more freely and walk farther, with less oppression about the chest. The patient continues using the respirator, and still improves; her expectoration is now very scanty. When I compare the condition of this lady's chest now with what it was some weeks ago, I must say that it is much better, and I am hoping that the disease may soon become latent, if not altogether destroyed in the lungs. This case is only one of a series that have obtained the greatest benefit from the use of Coghill's respirator. There is a little drawback to the use of the solution mentioned above in some cases. I have found one or two patients complaining of a dry condition of the throat, which has caused some irritation and coughing at the time; but this has been obviated by the patient swallowing a little glycerine before using the respirator.

Remarks.—The above case, and all the others in which the respirator has been used, have, at the same time, been carrying out other treatment suited to their respective peculiarities; but this would not, I am convinced from past experience, alone have effected the relief spoken of as having taken place. Although the results, so far, of using medicated respiration in pulmonary phthisis are extremely encouraging, still one cannot boast of an absolute cure. But with such means at our disposal as atropia to control sweating, quinine to reduce fever, digitalis to diminish the frequency of the heart's action, astringents for the check of diarrhœa, and medicated respiration, such as will relieve dyspnœa and coughing and prevent the waste that

goes on through expectoration, there are good grounds for indulging in the hope that this frightfully prevalent disease will soon cease to bring to a premature close so many lives.

Newcastle-on-Tyne.

DESCRIPTION OF AN OXYGENATED AIR LAMP FOR LARYNGOSCOPIC OR OTHER PURPOSES.

By GORDON HOLMES, L.R.C.P.E.

By supplying an additional amount of oxygen to the current of air drawn up by the flame of an ordinary lamp its brilliancy can be increased more than twofold. For the purpose it is necessary to surround the series of air-holes below the lamp-chimney with a channel or gallery, into which the oxygen can be poured so as to become involved with the draught of the lamp. The construction of the Silber lamp, which has already an unusually bright flame, is exceptionally convenient for this alteration, as the plate containing the air-holes is perpendicular and clear all round, so that the gallery can be fitted on and removed again, if required, without interfering at all with any other part of the mechanism.

The superadded channel should have the vertical measurement of the air-holes, and be about half an inch in lateral extent, whilst an aperture of half an inch in diameter should be left at each side for the passage in of the air and excess of oxygen. For permanent use this channel should be of metal, but in case of wishing merely to test the light, one can be formed very easily and efficiently in a few minutes as follows:—Cut two discs of pasteboard of one inch greater diameter than that of the part of the lamp to be embraced. Excise then the centres of these discs, so to allow them to be passed over the air-hole plate like a pair of rings, one to be pushed above and the other to remain below the air-holes. By pasting paper between the edges of the upper and lower rings a covered way is formed, the necessary apertures being left on each side. In order to obviate any waste of the oxygen, it is well to render the lateral openings tubular for about half an inch by pasting an additional rim of paper on to them.

In order to discharge the oxygen into the side openings, a bifurcating tube, like a **Y**, must be used, curved at the extremities for exit, so as to pass for a short distance into the tubular part of the openings, and having a stopcock in the single portion. The discharge apertures of this branching tube should be less than a line in diameter. A folding gas-holder, constructed like a bellows, which closes automatically when the pipe is open, is most convenient, but a simple bladder may be employed, and caused to empty itself steadily by a small weight being placed on it. The oxygen should be urged out very gently and equably, as anything of a draught disturbs the flame without corresponding advantage. A supply of one and a half cubic feet is amply sufficient for an hour continuously. The gas should, of course, be turned off when the lamp is not in actual use.

After various experiments I have found the above plan answer best for ensuring an equable admixture of the oxygen with the air. By slight modifications of these directions the oxygen can be supplied to any flame surrounded by a close-fitting chimney. The oxygen can be obtained from chlorate of potash and manganese dioxide in the usual way. About three ounces and a half of the former salt yield a cubic foot of oxygen. The light therefore costs but a few pence an hour; and, as it requires no cumbersome, complicated, or costly apparatus, whilst it exacts little or no attention, will be found convenient for the private consulting-room. Being much whiter than ordinary artificial flames, it shows the parts more nearly in their natural colour as seen by daylight. It appears to form a mean between common lamps, which scarcely give enough light for intra-laryngeal operations, and the limelight, which cannot well be managed without being constantly watched by a skilled attendant.

I may say, finally, that my experience of this light has been entirely confined to oil-lamps; and I cannot therefore express an opinion whether the oxygen would be so effective in giving brilliancy to gas-flames.

Finsbury-square.

ON A CASE OF TUBAL GESTATION.

By LEWIS G. DAVIDSON, M.D.

THE following case of tubal gestation may be considered of sufficient interest to warrant its publication in THE LANCET.

On the evening of July 19th I was requested to see a Mrs. C——, of whom the history given to me on my way to the house was as follows:—At 6 P.M. she had eaten a hearty tea, consisting of cold meat and salad, appearing to be in her usual health at the time. About an hour afterwards she accompanied her husband on a visit to a friend who lived a mile distant. Her husband left her at the house, calling for her again at nine o'clock. She accompanied him homewards, apparently quite well, for about three hundred yards, when she suddenly complained of great pain in the abdomen and became very faint. She was carried into the house of a friend close by and put to bed, a little brandy being administered. On recovering from the syncope, she still complained of intense pain in the abdomen. On my arrival the patient presented the ordinary symptoms of severe colic, for which I prescribed. She was able to inform me that she had not menstruated for ten weeks; but then she had discovered a faint "show," and although married a year and a half had not before been pregnant. On examining the areolæ around the nipples, I concluded she was that far advanced in pregnancy—viz., two months. After giving instructions I left the house.

About eight o'clock the following morning I was hastily summoned and found her dying. Her friends had not remarked anything unusual during the night; she had slept at intervals, and half an hour before her death she asked for, and drank, a cupful of milk and tea. Not feeling justified in giving a certificate, the coroner requested me to make a post-mortem examination, in which I was assisted by Mr. Charles Lamb Taylor, of this city, the result being as follows:—

On opening the abdominal cavity we found about six or seven pints of effused blood, after removal of which we discovered a cyst of the right Fallopian tube, the size of a large walnut, near to its opening into the uterus. There was distinct rupture of this cyst, which was filled with clotted blood, the ovum evidently having escaped into the abdomen, gradual hæmorrhage, as I conjecture, having continued through the night, terminating in collapse and death. The uterus was normal in appearance, but twice the size of a virgin one, weighing about four ounces. A blood-clot was found in its cavity, which sufficiently accounted for the slight "show" which she spoke of as occurring that evening, a very small quantity of blood having found its way from this cavity. In the right ovary a large corpus luteum was visible, the Graafian follicle having undergone the usual changes and attained the stage of maturation which one would expect to find at the eighth or tenth week of pregnancy.

This case appears to support the practice of operating in cases of tubular pregnancy when sufficiently advanced to enable a diagnosis to be formed, in contradistinction to that of those obstetricians who prefer leaving them entirely to nature, as the result shows the certainly fatal termination of rupture even at this early period. I do not think that a correct diagnosis was possible in this case, the only guide being the blood she discovered the previous evening, and it was too slight to admit of an opinion being based on it.

Goulburn, New South Wales.

HOSPITAL SUNDAY IN LIVERPOOL.—A public meeting of the Hospital Sunday promoters was held at the Liverpool Town Hall yesterday, the Mayor (Mr. W. B. Forwood) presiding. The treasurer's statement showed that the collections on Hospital Sunday amounted to £7468 18*s.* 4*d.*, while on Hospital Saturday the amount contributed by the working men throughout the city was £2323 9*s.* 5½*d.* With some donations the total was brought up to £10,027 10*s.* 9½*d.*, against £9720 14*s.* 1*d.* in 1880. The increase was in the amount collected from the working men, and satisfaction was expressed on this score. The amount was distributed amongst seventeen medical charities, the Royal Infirmary receiving the largest individual sum, £2880. The expenses of collecting and distributing the fund were £390 only.

A Mirror
OF
HOSPITAL PRACTICE,
BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

MIDDLESEX HOSPITAL.

A CASE OF TRAUMATIC PNEUMOTHORAX FROM SWALLOWING A FISHBONE; RECOVERY.

(Under the care of Dr. CAYLEY.)

FOR the following interesting notes we are indebted to Mr. Herbert Canton, physician's assistant.

Ellen L——, aged forty-eight, housewife, was admitted on March 15th, 1881, in a state of collapse, complaining of a severe cutting pain in the chest, which was especially aggravated on attempting to swallow and on deep inspiration. Whilst eating her supper the previous night (twelve hours before) she accidentally swallowed a fishbone. She was eating the head of a plaice at the time, and felt the bone stick in her throat. This caused her great pain at a spot corresponding with the sternal notch. She immediately attempted to dislodge the bone by taking large draughts of water and thumping her chest violently. She eventually succeeded, and felt the bone move downwards, and again stick (apparently in mid-sternal region), and here it remained in spite of her endeavours to remove it. The pain then became more acute "in the swallow," especially in the latter position. For some hours she continued her efforts to remove the obstacle by swallowing large pieces of masticated food, bread, &c., but without avail. She stated that eight or nine hours after the accident her breath became gradually short, and she experienced a sensation as if a load were on her chest, and she became faint and exhausted. The symptoms increasing in severity she applied at the hospital on March 16th, at 10 A.M. for assistance.

On admission she was a fairly-nourished woman. The face was pale and somewhat livid, with an anxious expression; the breathing was hurried and shallow, and 44 to the minute; the skin was cold and clammy; the pulse exceedingly small and compressible, and the extremities were cold. There was no cough, and the patient had not spat any blood. Thorax: There was little or no movement of the left side of the chest, even on forced inspiration, and pectoral fremitus was almost absent. The percussion note was full and clear, and somewhat tympanitic in character. No cardiac dulness could be made out, no bulging of intercostal spaces; the bell sound could not be elicited. The breath sounds over this side were extremely faint, and vocal resonance was diminished, the voice having a muffled tone. Over the right lung there was full pulmonary resonance, and exaggerated breath sounds. The impulse of the heart could not be felt in normal position, and the sounds here were extremely faint; but in the epigastrium the impulse was markedly perceptible, and the sounds well pronounced. There was no bruit; pulse 76. The patient having been put to bed, warm bottles were applied to the feet, and brandy was administered. About half an hour later the patient rallied somewhat; her face became a better colour, and her pulse improved, but she still complained of pain in the chest. Two hours after admission she was seen by Mr. Hulke, who passed an œsophageal horsehair probang into the œsophagus. On expanding and withdrawing the probang no foreign body of any kind was brought up; the hair, however, was slightly stained with blood. This operation did not appear to cause her much pain, and no immediate relief followed. A hypodermic injection of morphia (quarter of a grain) was then given, and the patient became easy and quiet. About 10 o'clock the same evening she expressed herself as feeling much better, the pain being less acute, and she had taken some liquid food without much distress. Her breathing was less laboured, and pulse 74, of better volume; respiration 40. She did not sleep much during the night, though she had a second injection of morphia, but next morning she was decidedly better, the condition of the chest being about the same; the breathing was abdominal, cardiac impulse more perceptible in epigastrium; sounds quite absent in normal position. Morning temperature 98·6° F., pulse 88, respiration 34; evening temperature 98·8°.

On the 18th, temperature 97·8°, pulse 75; patient complained of pain in the left mammary region. Auscultation revealed soft pleuritic friction in the anterior base and axilla; no dulness at base. The percussion note was less full on left side; vocal fremitus improved; voice sounds increased, as compared with previous state; slight pain in gullet, but not increased on deglutition.

On the 19th, temperature 98°, pulse 80, the pleuritic friction was rougher in character, and heard all over lower half of left lung. The apex beat was felt in fifth interspace to the left of the sternum, and not so well in epigastrium. The percussion note was less resonant, and there was some movement of chest wall during ordinary respiration. There was little or no pain in gullet, and no pain on deglutition. Pulse improved in force, and respiration 32.

On the 20th friction was heard over a larger area. Heart's apex beat was felt more distinctly to the left of the sternum than on the preceding day. Epigastric pulsation was less marked. No pain in gullet.

On the 21st percussion note was only slightly fuller on left side than right. Pleuritic friction was still present but less marked. Breath and voice sounds were more plainly heard. There was a little difference in the expansion of the two sides. The heart's impulse was best felt in fifth interspace, and slightly perceptible at epigastrium.

On the 22nd there was no appreciable difference between the expansion on the two sides. Resonance was still somewhat fuller over left, and breath sounds almost as well heard on this side as on the right. Friction scarcely audible, only an occasional pleuritic rub.

On the 23rd no friction was audible. Expansion and vocal resonance were equal on the two sides. The heart had resumed its normal position. No epigastric pulsation.

From this date the percussion note gradually improved until the 29th, when it became quite normal. The temperature throughout never exceeded normal, and at no time were there evidences of fluid in the chest. The respiration, which for the first three days was hurried, then became about normal and remained so. During her stay in hospital she never had any cough, and no spitting of blood. Patient was discharged on March 31st quite well.

Remarks.—From the above case it is evident that the fishbone pierced the œsophagus in some part of its course, and perforated the pleura, and probably also the lung, as a result of which pneumothorax ensued. It is very unlikely that air could have entered the pleura through the wound in the œsophagus. When the œsophageal bougie was passed the supposition was that the bone was pushed through into the pleural cavity, setting up pleuritis, and subsequently becoming encapsuled. It is remarkable that no hæmoptysis or physical signs followed the wounding of the lung.

ST. BARTHOLOMEW'S HOSPITAL, CHATHAM.

A CASE OF RAPIDLY GROWING ANEURISM OF THE ARCH OF THE AORTA; DEATH.

(Under the care of Mr. G. H. PATTERSON.)

FOR the following notes we are indebted to Mr. W. B. C. Deeble, M.R.C.S.

William B——, aged forty-six, was admitted on Aug. 10th, 1881, suffering from an impacted calculus at the orifice of the urethra. This was removed, and after an attack of orchitis the patient became convalescent.

On Sept. 6th, 1881, the patient complained of not feeling so well, and thought he had caught cold; there was a little cough. This got better, and then he complained of rheumatic pains in his shoulders and arms. On the 11th the cough was more troublesome. During the night he had a fit of coughing, and whilst this was on a tumour the size of a large walnut appeared between the right ear and the angle of the jaw; it was soft and fluctuating. At the same time another swelling appeared extending over the anterior part of the chest, at the sternum. This swelling was the size of an orange, but flat, had a distinct, distensile pulsation, and slight bruit; the skin was shining and tense, and the veins very much distended. It pitted on pressure. The pulsation shook the patient's head and the bedclothes. He looked very pale in comparison with his former healthy aspect, and very anxious. He complained of a cough, but

no pain. The pulses at the wrists were weak and unequal in volume. The right pupil was somewhat contracted. Ten grains of iodide of potassium were given every three hours. There was no swelling, or complaint of any, on admission into the hospital. On the 12th the swelling had increased in size; the skin was ecchymosed over the most prominent part of the tumour. Measurement of tumour: Longitudinally, from episternal notch to base of tumour, 8 in.; transversely, 16 in. The patient complained of phlegm accumulating in the air-passages, which he was unable to expel; no pain; voice a little husky; he wandered a little at times; pulsation increased. Next day he was in the same condition; the phlegm was still troublesome. Ordered steam inhalations, which gave great relief. On the 14th the swelling had increased very considerably, nearly to the level of the chin. Measurement: Longitudinally, 9½ in.; transversely, 17 in. It was much more prominent and pointed. Another tumour had appeared over the inner third of the left clavicle about the size of a Tangerine orange. Constitutionally he was much the same, but on the following day there was a slight oozing from the smaller tumour. On the 16th the breathing was stertorous. The patient had considerable cough, looked very emaciated, and complained of intense thirst. Next day the breathing was worse, the thirst continuing, but no pain. He wandered a good deal, became suddenly worse in the afternoon, and died at 5 P.M.

Necropsy, eighteen hours after death.—Rigor mortis well marked; body thin; tumour subsided considerably; discoloration over the most prominent part. Point of suppuration through the second intercostal space on the left side. Considerable serous effusion in the pericardium. Chronic pleurisy on the left side. Heart somewhat hypertrophied. Aorta very atheromatous, with calcareous plates; also dilated. At the junction of the ascending and transverse parts of the arch of the aorta was a circular opening communicating with a large cavity (which formed the tumour externally). On opening up this cavity it was found lined with firm laminated fibrin, and filled with ante- and post-mortem clots. The tumour itself was of the dimensions of a good sized cocoa-nut. The lower part of the anterior wall was thin. The sternum and cartilages of the upper two ribs were eroded and perforated by an irregularly roundish orifice one inch and a half in diameter. The part of the sac projecting through the orifice formed about one-third of the whole; the bulk of the tumour extending to the chest wall was formed by ante-mortem clots outside the sac. The arteries coming off from the aorta were not affected. The larynx and trachea were inflamed, and the mucous membrane covered with a thick layer of muco-purulent secretion. About the seventh ring of the trachea, on the posterior part of the inner surface on each side of the tracheal muscle was a longitudinal ulcer half an inch in length, and the cartilages for the space of two or three rings were eaten through on the right side, forming a perforation. The cricoid and thyroid cartilages were ossified; calibre not diminished. The bronchi were filled with frothy mucus and the lungs œdematous. The sternum, after maceration, presented the following appearances: There was a perforation three inches in circumference, with dentated edges, concave on the posterior surface. The bone was fractured at the third intercostal space. The right sterno-clavicular articulation was disorganised, the clavicle dislocated forwards, and its sternal end carious.

Remarks.—The interest of this case lies in the rapidity of the growth of the tumour, its sudden appearance, and in the fact that the man considered himself to be in perfect health till he noticed the swelling, and the length of time the patient lived after the aneurism became diffused is worthy of note, this having taken place on the 11th and death not occurring till the 17th of September.

DEVON AND EXETER HOSPITAL.

ANEURISMAL VARIX OF THE FACIAL; LIGATURE ABOVE AND BELOW THE SAC; RECOVERY.

(Under the care of Mr. BANKART, F.R.C.S.)

FOR the notes of this interesting case we are indebted to Mr. A. G. Blomfield, M.B., house-surgeon.

Stephen N——, aged twenty, was admitted on May 12th, 1881, with a pulsating tumour of the right side of the face. The history was as follows:—Two years and five months before, while attending a shooting party, he was accidentally shot in the right side of the face and right arm, two shots entering near the angle of the jaw, and one below the inner angle of the eye. The bleeding from the face at the time of the accident was, he said, considerable, but no particular treatment was required to check it.

On admission there was seen a distinctly pulsating tumour, extending over an area of three inches, beginning three-quarters of an inch below the right lower jaw over the site corresponding to the course of the facial artery, and going upwards on the cheek over an area which would be intersected by a line drawn from the inner canthus of the right eye to the angle of the jaw. The pulsation was attended by a characteristic thrill or "hum." The thrill was most distinct just under and about one inch above the edge of the lower jaw; it was also very distinct below the inner angle of the eye. Above, in the corner of the right eye, was a small varicose, bead-like swelling, distinctly pulsating, bluish in colour beneath the skin, and communicating by means of a small dilated vessel across the top of the nose with a dilated branch of the left facial vein. Pressure on the facial vessels opposite the angle of the mouth, by a finger in the mouth and another on the cheek outside, stopped pulsation and thrill above this point, but not below. Compression of facial on the edge of the jaw only partially limited pulsation and thrill in the lower portion of the face, and not at all at the angle between the eye and the nose. These vascular pulsating swellings had, he stated, gradually appeared since the accident. He could fix no certain date when he first took notice of them, but he had especially noticed an increase in size during the six weeks previous to his admission. His general health was excellent.

On May 20th, finding that pulsation could not be entirely controlled by pressure, Mr. Bankart cut down upon the right facial artery where it crosses the lower jaw, and ligatured it above and below the points of communication with the aneurismal sac. A straight incision was made along the lower jaw, subsequently extended by a straight incision at right angles downwards. The facial artery below the jaw was hypertrophied and remarkably tortuous, and was joined on the jaw by a large branch from under the angle of the jaw. Above was a pulsating sac into which there was a direct communication from the facial main trunk. No difficulty was experienced in tracing the artery into and out of the aneurism. The lower ligature (silk) was put on a short distance from the sac, and it was then found that pulsation was kept up by the branch from under the angle of the jaw, and this was then tied. The result was to almost completely stop pulsation in the sac; pulsation still continued at the angle of the eye by a branch from the transverse facial which could be felt in the cheek. A ligature was then put on the facial above the sac, when the pulsation at the inner angle of the eye also ceased. Dry lint dressing was applied. The temperature on the evening of the operation was 100°, and on the fourth day it became normal. All the ligatures came away in the usual course, but one did not separate until July 21st. There was no return of pulsation after the operation, and on July 23rd he was made an out-patient so as to be kept under notice for a time. On September 21st he was discharged cured, there having been no return of pulsation in the sac, and none could be detected by examination. The veins below the right lower eyelid are still dilated and visible through the skin, but there is no pulsation.

Medical Societies.

ROYAL MEDICAL & CHIRURGICAL SOCIETY.

Congenital Macrostoma, accompanied by Malformation of the Auricles and by the Presence of Auricular Appendages.—A Successful Case of Simultaneous Ligature of the Subclavian and Carotid Arteries for Innominate Aneurism.

THE ordinary meeting of this Society was held on the 8th inst., Dr. Barclay, President, in the chair.

The following is an abstract of a paper by Mr. JOHN H. MORGAN, on Two Cases of Congenital Macrostoma, accompanied by Malformation of the Auricles and by the Presence of Auricular Appendages:—Case 1. One patient is a year old and very small, the deformity consists of a fissure-like

prolongation of the mouth downwards and backwards into the left cheek, and extending about three-quarters of an inch and involving all the structures of the cheek. The lower maxilla is considerably smaller than normal, and the movements are not symmetrical, the external auditory meatus is larger outwardly, and placed more anteriorly than usual, and runs backwards where it becomes narrow in front of the membrana tympani, which, with the ossicula is believed to be natural. Two so-called auricular appendages are placed in a line, one below the other, on the cheek between the tragus and the extremity of the fissure. One similar growth exists on the right cheek, and there is a similar but less morbid condition of the meatus on this side. The hearing is believed to be good. There is no history of hereditariness. Case 2. A child, aged five, delicate, presents an almost identical condition on the opposite side of the face. The mouth is prolonged into the cheek on the right side of the face, and there are two similar growths on the cheek, and the external meatus of both ears is expanded outwardly. The malformation of the lower jaw is not so evident, but it is smaller than usual. Hearing is fairly good in both ears, and the child talks naturally. There is no history of hereditariness. The two cases justify the observation that malformation of these parts are more frequent in females, but the only two cases hitherto described of macrostoma have not been accompanied by any deformity of the ears and their appendages. It is suggested that the deformity of the mouth is due to non-union of those parts of the first branchial arch which form the upper and lower jaw, and not to any error of formation of the oral opening. Whilst the auricular appendages are probably aberrant remnants of the opercular skin fold of the first post-oral branchial cleft, they are much more common in all domestic animals than in man; but the author has found them in two cases lately, in neither of which was there any branchial fistula, whilst they were not present in a case of branchial fistula, in front of the right sterno-mastoid in a boy. The patients were exhibited to the Society.—Mr. MASON remarked on the rarity of these cases. He had seen only two presenting the condition of macrostoma; and in his work on "Diseases of the Face" he records and gives an illustration of a case under the care of Dr. Moxhay of Reading. Another case is also there recorded.—Mr. HOLMES supposed the most interesting point beyond the fact of macrostoma was the malformation of the skin about the auricle, and its connexion with aberrant development of parts about Meckel's cartilage. He asked whether any similar abnormal conditions were noticed about the skin of the auricle itself. The well-known plate from Van Ammon shows the abnormal development of the mouth, but no change about the skin. By sewing the fissure together the condition would be cured. It was very rare to see two such cases together.—Mr. SAVORY had a young man, twenty-two years of age, in hospital, a year ago. The mouth was carried up at one angle; no other deformity existed. The edges of the lips were pared and brought together, the one piece being brought round to the other, so as to obviate a cicatrix, which would hamper the movements of the angle of the mouth.—Mr. MASON believed, in Sir W. Ferguson's case, the deformity of ear was also present.—Mr. BARWELL showed the elder of the children at the Congress Museum, and it was seen by many distinguished foreigners, as Kölliker, Langenbuch, and none had seen a similar condition.—Mr. B. HILL said Virchow had described a dissection of such a case in one volume of his *Archives*.—Mr. T. SMITH had a case at St. Bartholomew's Hospital where a foramen existed, separated from the mouth by the orbicularis muscle, and it formed a sort of second oral aperture. It was readily remedied by sewing it up. He had seen two cases of supernumerary auricles in which the auricle itself was naturally formed, but which were not associated with deformity of the mouth.—Mr. CLEMENT LUCAS asked Mr. Morgan if in some member of the family there might not be a foreshadowing of such deformity in the mouth or ear; for it is quite certain it may be transmitted. He knew of two cases of cleft palate in one family, and had noticed in cases of cleft palate a sort of incomplete fissure in a parent, and in a case of cleft palate he found it foreshadowed by a harelip in an uncle.—Mr. DALBY said it was not uncommon to find supernumerary ears with perfect hearing, but seldom that any deformity occurred in the ear itself without defect of hearing. When Sir James Paget's paper was read Dr. Allen Thomson showed a drawing of a fistula in the seat of the auditory meatus. Mr. Dalby had never seen deformity on one side with defect of hearing without there being also some deformity and absence of hearing on the other; but these little appendages were often asymmetrical.—Mr. MORGAN, in reply, regretted the enforced absence of Sir James Paget, who took much interest in the subject, and whose remarks would have added so much to the value of the discussion. He brought forward the cases in deference to Sir James Paget's suggestion in his paper. It is unusual to get macrostoma conjoined with deformity of the auricles, and he only knew that evening that one case was figured in Sir W. Ferguson's work. One question to be cleared up would be, Why the deformity should be more frequent in females, as Hensinger truly pointed out? Since his attention was called to it he had already collected a number of cases of deformity of the ears, which he hoped some time to bring before the Society. Another question was the influence of maternal impressions on their production, which cannot be altogether ignored, especially in such cases, where the malformation must occur very early in intra-uterine life. It would be of interest to know what impression on the mother could produce it, and why a small portion of the germinal membrane should thus go astray. In these cases there is no doubt an error in the formation of the first branchial arch. It is curious that the deformity of the mouth is on one side, and that the auricular deformity is on both sides, in the formation of the opercula. He was glad to hear Mr. Dalby's confirmation of the fact that there is no deformity of the middle ear in such cases, but hearing is perfect and the membrana tympani in its proper position. Dr. Allen Thomson points out their frequent alliance with cleft palate and hare-lip. At the Children's Hospital, out of a very large number of the latter cases, Mr. Morgan has never seen any malformation about the ears or lower jaw. Mr. Eve has an interesting specimen of very great deformity of the lower jaw of a lamb, the deformity extending right up into the ear, from the mouth, confirming Hensinger's statement as to the frequency of such malformations in lower animals. The question of operation was not of great interest, the only reason for deferring it in this case being the state of the child's health. He thanked Mr. Barwell for allowing him to record the case. The supernumerary auricles in the neck are not so very infrequent, and were only interesting in connexion with this case as confirming the suggestion of Sir James Paget. He could not get any satisfactory evidence of hereditary influence, although he had made extended inquiries, which did not elicit any information as to similar deformities in other members of the family.

The following is an abstract of Mr. H. W. Langley Browne's paper on "A Successful Case of Simultaneous Ligature of the Subclavian and Carotid Arteries for Innominate Aneurism." Suffering from the above disease, in an advanced form, John A——, aged thirty-two, was admitted into the West Bromwich Hospital on June 29th, 1881. The sac walls and coverings were thin and liable to rupture. There was a loud bruit over the swelling. The man was very weak and suffered intense pain in the chest. On July 11th, 1881, the two arteries were tied with chromic catgut ligature, which Professor Lister had himself prepared. Antiseptic measures were used throughout. The highest temperature was 100·6°. Pulsation returned in the right temporal four days, and in the right radial nine days after ligature, and is even yet very slight at the radial. There is much less pulsation in the tumour, which has strong thick walls. There is no bruit or pain. The man feels so well, that he has already tried to work. The condition of the tumour on Oct. 28th is still one of improvement.—Mr. BARWELL congratulated the author on the great success of his case, and inquired as to the condition of the rest of the aorta and the heart, as the success or not of operations in such cases depends much on this. There are now on record 28 cases of double deligation, or rather 27 exclusively of Hobart's and Rossi's—of these 9 died within fifteen days; 8 lived various periods under six months, the shortest time being two months and a half; 9 have lived over a year; shortest, fourteen months; and longest (Heath), seven years and seventeen days. Most of the cases which have died have been examined after death, and in the first category are 3 cases which died from troubles due to the ligature; in one from secondary hæmorrhage, another from exhaustion, and the third from ether administration. Of the second category, those who died earliest had extensive atheroma of the aorta; one living fourteen months had a second aneurism of the descending aorta. Three cases were still living—viz., Stevenson's, Wyatt's, and Langley Browne's. On these data some conclusions may be come to as to the contra-

indications for operation. Dilated aorta caused death from suppuration of the sac or its rupture, or exhaustion, which really meant disordered circulation. Tying two such vessels close to the aorta must tend to considerable increase of tension in the rest of the aorta. When the aorta is already dilated as well as atheromatous, the double distal deligation may be followed by rapid death; when atheromatous and not dilated, other disturbances of circulation ensue. When also a large aneurism involves the first and second divisions of the aorta, the heart is hypertrophied, and there is also generally aortic incompetence. Before operating the absence of such cardiac and aortic conditions should be determined.—Mr. HOLMES thought it almost a pity to publish these cases so early; it is very difficult to see how much benefit depends on the result of distal deligation, and how much on rest in bed. The danger of rupture which appeared imminent may have passed away, but it was a misnomer to call it a "successful" case. If it was meant by "successful" that the aneurism is cured, and there is no danger of its growing again, there is no proof in this record, only a marked improvement. He was not aware that any surgeon operated in any such case knowingly in presence of heart and aortic diseases. If there be cardiac hypertrophy or aortic disease he is rash who would then operate. The difficulty is to know when the aorta is dilated and atheromatous; there are very few cases in which they are not so, but the signs are not certain. Mr. Holmes doubted very much whether Hobart ever tied the subclavian; it would have been very remarkable if there had been any anatomical evidence that the first part of the subclavian had been tied, but this evidence was wanting, the part being destroyed at the post-mortem. Rossi's case is variously related. In commencing this operation one should not indulge in too sanguine expectations. He had never seen a case actually cured—i.e., delivered from the disease—although he had seen much benefit derived in many cases.—Mr. HEATH agreed with Mr. Holmes as to the difficulty in diagnosing an aneurism of the innominate from one of the aorta; in his case, eighteen years ago, it turned out to be aortic. In most of the cases in Wyatt's tables the aneurism was of innominate and aorta, and in some of aorta alone; there was really no positive test, and it is a pity that the case should be brought forward so early. There is a preparation which shows such an aneurism perfectly cured. If it be right that no operation should be done in presence of atheroma, as Mr. Barwell had said, how could he justify his operation of double ligature in aortic aneurism, and yet in some of these cases life had been prolonged.—Mr. BARWELL said he had stated "extensively" atheromatous as a contra-indication.—Mr. HEATH thought a large aortic aneurism must be certainly atheromatous.—Mr. LANGLEY BROWNE, in reply, said so far as he could make out the heart was sound, but he could not speak with certainty about the aorta. He was hoping from the history that the aneurism was chiefly traumatic, and that atheroma at his age might be absent. The test of its being innominate was based on that given by Wardrop—viz., by its commencing nearer the trachea and sterno-mastoids—and it was altogether formed in six months. It is a case of successful ligature of the subclavian and carotid, in the sense that a herniotomy may be successful without at the same time radically curing the disease. So far as a cure of the disease goes it is, of course, too early to speak. The chromic gut was used in the operation. Eight years ago he had tied the common carotid for a carotid aneurism with carbolic gut ligature, which gave way in a few days, with return of pulsation, but eventually recovery, and the patient still lives. In another case he applied the carbolic ligature to the femoral; it also gave way, and amputation had to be performed. No trace of the ligature remained. In the present case no ligature was left, but it held firmly for a longer time than the carbolised gut.—The Society then adjourned.

MEDICAL SOCIETY OF LONDON.

Disease in Pons Varolii.—Paralysis of Left Sixth and Seventh Nerves.—Renal Calculus and Pyo-nephrosis.—The Origin of Vaccine and its bearing on Animal Vaccination.

AT the ordinary meeting on Nov. 7th, Dr. BROADBENT, (President, in the chair) related a case of Disease of the Pons, with Paralysis of the left sixth and seventh nerves. The case was brought forward as a companion picture to that of the patient shown last week, in which, with paralysis of seventh, eighth, and ninth nerves, the lesion producing it was considered to be outside the nervous axis. The patient, a young man aged twenty-four, enjoyed good health till five years ago, when he had a fit, after which he was never quite strong, and became absolutely deaf in the right ear. In March he began to suffer much from headache and confusion, squinting was observed, and later distortion of the face. The paralysis affects the left sixth and seventh nerves; there is internal strabismus of the left eye, with very slight conjugate weakness of the right internal rectus and the left face exhibits the form of paralysis characteristic of lesion in the facial nerve, or its nucleus, though not in a very marked degree. Dr. A. de Watteville found, on examination, that the electrical reaction of degeneration is present. The combination of paralysis of the sixth and seventh nerves is of itself almost conclusive as to the existence of disease within the medulla, in or near the nucleus, in the floor of the fourth ventricle common to the two. There is, moreover, other evidence of mischief here situated; the patient's gait is unsteady, as if from interference with the functional perfection of the cerebellum, and in walking he almost invariably staggers to the right, which, with slight unsteadiness of the grip of the right hand, is probably an early indication of paresis in the right limbs, which, if established, would give, with the paralysis of the left face and left external rectus, characteristic cross-paralysis. A further indication of intracranial mischief is his emotional mobility either in the direction of laughing or crying. The optic discs are normal, or, at any rate, not swollen; they present, on the contrary, rather deep cupping. No explanation of the deafness in the right ear is suggested. In answer to two questions, Dr. Broadbent replied that he had formed no definite opinion as to the nature of the lesion; he was inclined to think, however, that it was gliomatous. The patient had for a time been prescribed iodide of potassium, but with no good result; he was taking a tonic of iron and strychnine.

Dr. ALLCHIN then read notes of a case of Renal Calculus and Pyonephrosis in a female aged sixteen. The only history there could be obtained was that she was in hospital some years ago suffering from "kidney disease," since which time she has ailed more or less, but with no definite symptoms. For the past six weeks she had been much worse. On admission into Westminster Hospital on Oct. 14th, 1881, she was in a very prostrate condition, complaining of great pain and tenderness in the lumbar region; immediately below the last rib a distinct swelling was perceptible. There was frequent and very scalding micturition; urine scanty, strongly alkaline; sp. gr. 1020, albumen ¼; copious deposit of mucus, phosphates, and some blood. Microscopically the deposit showed crystals of triple phosphate, numerous pus-corpuscles, modified epithelial cells, and large flakes of several layers of vesical epithelium. There were constipation; dry tongue, coated with brown fur, and pyrexia; no signs of peritonitis. No œdema of feet. Chest healthy. The temperature rose to 102·6° within twelve hours of admission, and the patient gradually got worse until her death, four days after admission. Leeches and hot fomentations were applied. On the day after admission there were a good deal of sickness and diarrhœa, which lasted only for the day. At the post-mortem examination there was no peritonitis, and no perineal suppuration. Both kidneys were advanced in destruction, the pyramids being almost entirely replaced by cysts containing grumous, viscid, purulent fluid, similar to that in the bladder, and to what was voided during life. The right kidney was about three times the normal bulk, the left one-third of normal. A large calculus was lodged in the pelvis of the right kidney, and another as large as a horse-bean in the left ureter, two inches below the pelvis. Both ureters were much distended. There was considerable excoriation of the vesical mucous membrane. Several post-peritoneal glands close to the hilus of the right kidney were much enlarged. The uterus was twisted to the right, and flexed forwards. Other organs healthy. Dr. Allchin remarked, in reply to Mr. Heywood Smith's question, that the patient was by no means thin, and that the back was so tender that percussion could not have been carried out. He was inclined to agree with a remark of Dr. Rogers', that the contraction of the right broad ligament was probably of congenital origin.

Dr. DRYSDALE read a paper on the Origin of Vaccine and its bearing on Animal Vaccination. He reminded the Society that he had raised the question of animal vaccination on two previous occasions, in November, 1875, and in

1877. He now called attention to the two points—(1) the origin of vaccine and (2) the deterioration of vaccination. The former question, from having been once settled in this country, had come to be an open question once more. Jenner believed that a disease in the horse was the origin of cow-pox, and recent experiments at Lyons in a great measure confirmed this view. The next view was that vaccinia arose frequently from the infection of cows with small-pox contagion from man. There was much to be said still in favour of this, and Dr. Drysdale believed it to be a *vera causa*. The spontaneous origin of cow-pox in the cow was also vouched for by many well-authenticated facts, especially in the Beaugency case in 1866, and also by the evidence of Mr. Ceely in 1840. There was also no legitimate room for doubt that vaccine had been produced by the variolation of cows, twice by Mr. Ceely, thirty times by Dr. Badcock of Brighton, and once by Dr. Green of Birmingham. The Lyons Commission of 1865, presided over by M. Chauveau, had reported that vaccine and variola were quite distinct, merely on the strength of a few negative variolations of cows, which produced no vesicle at all, but only papules, which could in no way be likened to the large and well-marked vesicles produced by Ceely and Badcock. It was curious that M. Chauveau and his colleagues should have considered that this was any disproof of the positive results of these two observers. As to their having given variola by restoring the lymph of these papules to infants, that was not to be undervalued, as the pus of the variola was deeply inserted into punctures in the animals and was merely transferred back again to the infants. Had the Lyons Commission operated for a longer time, and on more animals than the 12 to 17 they mentioned, they obviously would have produced vesicles as Badcock had done in 7½ per cent of his inoculations. As to the second point, the alleged degeneration of vaccine lymph, Dr. Drysdale said it was clear that the original induction of Edward Jenner referred solely to the 12 or 13 observations which he had recorded of persons who, having had cow-pox from fifty-two to two or three years previously, had been inoculated by him with small-pox virus, and had shown themselves refractory to the contagion of variola. Jenner obviously was not warranted in inferring from this that humanised lymph would long continue to be a protection as cow-pox against variola, and he had said this in one passage of his work. Humanised lymph had succeeded admirably in its protective power, possibly as long as Jenner lived—that is, as long as the year 1823, when his death took place; but soon after that, until the present date, it had been alleged that the virus was weaker in its power of forming a good scab and in protective powers than it was in 1800. A writer in the Encyclopædia Britannica, cited by Dr. Cameron at Dublin, had shown that even as late as from 1818–23 the mortality of vaccinated persons when attacked with small-pox was only 1 in 330, that in non-vaccination 1 in 5; but in the last epidemic in London (1870-79) no less than 1 in 10 of all vaccinated attacked had died, although, too, the number of insertions nowadays was far greater than in Jenner's days. Dr. Warlomont and Dr. Henry Martin, on the other hand, claimed for animal vaccination direct from the calf an even better preservative power against small-pox than the early records of the century showed the Jennerian lymph to possess, and so did Mr. Badcock and Mr. Ceely with respect to their lymph. Martin, too, insisted on the absolute freedom from erysipelas in animal vaccination, and of course as to its freedom from all suspicion of syphilis. He had told Dr. Drysdale, at Ryde, that he had on several occasions offered 100*l.* reward to anyone who could show him a patient vaccinated by him since 1870 in the U.S.A. with animal vaccine who had contracted small-pox. No one had yet claimed the reward. Martin alleged, too, that there was no degeneration in the vaccine, or in the duration of the scab, on the cases vaccinated by him from 1870 to 1877; and that having often vaccinated his patient, one arm with London lymph, and on the other with animal vaccine, he had observed quite a notable inferiority in the English lymph, the scab of which fell on the fourteenth day, whilst that of the animal lymph remained on till the twenty-first to the thirtieth day. Animal vaccine jars could be had for vaccination and revaccination in unlimited quantities in epidemics, whilst humanised vaccine was then a scarce article. When time enough was taken the animal lymph almost always "took" in vaccination, and in 73 per cent. of revaccination. For all these reasons it appeared to the author that sooner or later animal vaccine direct from the calf must supersede humanised lymph. The expense was greater, doubtless, but all civilised Governments, like the Dutch, sedulously cultivate the calf lymph, and send it freely away to the medical profession. Dr. Green had suggested that if ever there was any sign of the animal lymph deteriorating a cow could be variolated, and from the vesicle a calf should be vaccinated, and thus the stock kept up without any fear of conveying small-pox; but evidence at present seemed to point to non-necessity of renewing stock of animal virus. Finally, the author would suggest that the Medical Society of London—Dr. Jenner's former much honoured Society—should form a committee to investigate the question of the origin of vaccine, and report upon animal vaccination to the Government.—Mr. GOUDE asked Dr. Drysdale at what stage of the eruption he would take the variolous lymph for the inoculation of the heifer.—Dr. GILBART SMITH spoke in favour of the efficacy of the calf lymph. Using it fresh as he had done he had found it almost invariably produce a vesicle which possessed characteristics better pronounced than were those of ordinary lymph.—Mr. HAMES had used the calf lymph to a great extent, and was satisfied with it in practice. One point required attention, and that was the way in which it was obtained. Often it was given out in glass tubes. He explained how, in the collection of the lymph, animal juices, owing to the application of the clamp, were allowed to pass into the tubes. Lymph so obtained was apt to produce septicæmia and other troubles. It was impossible to take too great precaution in securing the purest lymph; tube-preserved lymph should, in his opinion, never be employed.—Dr. SHERFY said that in Brooklyn animals were maintained at the expense of the State for the supply of pure lymph. Thus the Americans were fully alive to the superiority of the animal vaccine matter. If any great constitutional trouble followed the inoculation of cow lymph, the parents of the children were satisfied, but that if they followed on the use of the humanised lymph there was what would be called in Chicago "a row."—Dr. DRYSDALE replied that we must be prepared to meet all the charges of the anti-vaccinationists, and that if the vaccine lymph were employed in the place of humanised lymph, one great cause of their complaining would be removed. He agreed that glass tubes were bad for the lymph, and should never be employed. The supply of lymph should not be made a matter of commerce, but ought to be supplied as it is in Holland and Belgium, in unlimited amount, to all vaccinators, and free of charge. The expense in England of keeping up animal vaccine establishments would be trivial, but in any case the expense should never be considered in comparison with the momentous question of a constant and pure supply of lymph and the more perfect protection of the public.

OBSTETRICAL SOCIETY OF LONDON.

Relation of Anteflexion of the Uterus to Dysmenorrhœa.

AT a meeting of the Society, held on October 5th, Dr. Matthews Duncan, President, in the chair,

Mr. F. WALLACE showed an Anencephalous Fœtus, with Spina Bifida.

Dr. HERMAN showed a Translucent Sac, 1⅝ in. by ⅝ in., which had been passed by a woman who supposed herself three months and a half pregnant, and was followed after some hours by a placenta with a rudimentary cord. Within it, attached to its wall, was a solid body as big as a pin's head. He regarded the specimen as the dropsical membrane of a blighted embryo.

Dr. EDIS exhibited two Polypi Uteri. The first was the size of a walnut and intra-uterine. It was removed by torsion with ovum forceps from a woman, aged forty-six, who had suffered from severe periodical hæmorrhages for twelve months. The second was a fibroid polypus, as large as a goose's egg, and was removed from the vagina by écraseur.

Dr. WILTSHIRE exhibited two Pendulous Cysts from the Labia Minora. They were removed from different patients, and contained translucent fluid. Such cases were extremely rare, and were mentioned by no author except Schrœder.

Dr. BRUNTON showed plaster casts of a Fœtal Head, which he had delivered for a neighbouring practitioner. Forceps above the brim and version had been tried in vain. He applied his modification of Assalini's forceps, then, failing

with them, retained them upon the head, amputated the body to gain room, and perforated between the blades.

Dr. GALABIN showed Microscopic Sections of a Membrane which was periodically discharged in the middle of the intermenstrual interval, in a case of cervical endometritis. It consisted of an exudation made up of fibrin and cells, some of which showed a tendency to grow into processes. At the edge was a border of inverted cervical epithelium, which had been brought away with the exudation.—Dr. WILTSHIRE thought the fortnightly exacerbations explicable on the hypothesis of hebdomadal periodicity which pervaded the menstrual function. He knew many cases of fortnightly menorrhagia.

Dr. HERMAN read a paper on the Relation of Anteflexion of the Uterus to Dysmenorrhœa. The object of the paper was to inquire as to the correctness of the widely accepted theory that anteflexion causes dysmenorrhœa, by leading to narrowing or temporary occlusion of the uterine canal at the point of bending. The evidence required to prove this was of two kinds, anatomical and clinical. The anatomical was first considered. First, it had to be shown that in anteflexion the canal was bent at an angle, and that a spur of tissue projected inward and blocked up the canal, as figured diagrammatically in many works. But in four specimens of anteflexion in London museums the curve was quite gradual; there was no angle, or dilatation of the uterine cavity. Next, the author had searched in vain for any case of retention of the menstrual blood and dilatation of the uterine cavity for which no other cause than an anteflexion existed, or of a pelvic hæmatocele, dependent upon stenosis of the uterine canal from anteflexion. The clinical evidence was then discussed. The arguments in favour of the theory fell into three groups. 1. That drawn from the patient's sensations. 2. That drawn from the afferent hindrance to the passage of the uterine sound. The author gave reasons for thinking these arguments inconclusive. 3. That drawn from the frequent association of acute flexion with dysmenorrhœa. The author pointed out that before concluding from this association that the anteflexion is the cause of the dysmenorrhœa, it was necessary to know how often anteflexion occurs without functional disorder of the uterus. He quoted summarised statistics from various other observers, which showed that out of 431 women anteflexion was present in 185, and the uterus was straight and in the axis of the pelvis only in 153. He had himself examined 102 women, who had applied for treatment, not for functional disorders of the uterus, but for local contagious disorders, and in 49 of these he found the uterus markedly anteflexed. Of the 53 in whom the uterus was slightly or not at all bent, in 38 there was little or no pain at the menstrual period, and in 15 severe pain, but of the 49 in whom there was pronounced anteflexion, in 33 there was little or no pain at the menstrual period, and in 16 severe pain. So slight a difference the author thought was practically none. As to the effect of treatment, the author pointed out that dysmenorrhœa with anteflexion was often curable by rest, by vaginal pessaries, by depletion, by incision, or by dilatation of the cervix, remedies which do not straighten the uterus. Benefit following the use of intra-uterine stems might be due to their effect in dilating the canal, in stimulating the uterus, or to the preparatory treatment. In cases in which the first mentioned kinds of treatment had failed, there was no evidence that intra-uterine stems succeeded. The purport of the paper was summarised in the following propositions:—1. That there is no anatomical evidence that anteflexion causes any hindrance to the escape of menstrual fluid. 2. That there is reason to think that well-marked anteflexion is present in nearly half of all women who have not borne children. 3. That, therefore, it is to be expected that anteflexion and dysmenorrhœa would frequently coincide. 4. That dysmenorrhœa is practically as common when the uterus is straight as when it is anteflexed. 5. That painless menstruation is practically as common when the uterus is anteflexed as when it is not. 6. That when dysmenorrhœa and flexion go together the severity of the pain bears no relation to the degree of the bending. 7. That dysmenorrhœa, associated with anteflexion, is frequently cured without straightening the uterus. 8. That there is no evidence that straightening the uterus invariably or even frequently removes dysmenorrhœa which is associated with anteflexion, and in which other methods of cure have been ineffectual. 9. That these facts show that the relation between anteflexion and dysmenorrhœa is not that of cause and effect, but merely that of coincidence.—Dr. GERVIS, after expressing his admiration of the care and ability shown in Dr. Herman's paper, ventured to doubt whether his deductions were valid, even if his facts remained unchallenged. He believed it to be quite possible for even a flexion of the uterus to exist, and yet no obstruction to be produced, provided the calibre of the cervical canal was not intruded upon by the bend. In one of the cases cited there was no obstruction in the canal, though a very marked curvature was present. It was a question whether it would not be well to recognise a class of cases of antecurvature as distinct from sharp flexion, and Dr. Herman's cases of anteflexion without symptoms would mostly belong to these. He still believed that if there were obstruction to the cervical canal there would be the symptoms characterising obstructive dysmenorrhœa.—Dr. AVELING asked Dr. Herman what method he had adopted in discovering the amount of displacement and in distinguishing between anteflexion and anteversion; also whether the conditions of the bladder had been considered in each case? Dr. Aveling thought anteflexion was the cause of obstruction, resulting not only in dysmenorrhœa, but in sterility.—Dr. HERMAN explained that he had estimated the anteflexion by bimanual examination.—Dr. GALABIN thought that great credit was due to Dr. Herman for his scientific paper. But unfortunately statistical inquiries always came out in support of the previous opinions of the authors. Dr. Graily Hewitt's recent statistics on the causation of hysteria would, if free from any influence of unconscious bias, demonstrate the extreme importance of anteflexion as completely as Dr. Herman's would, on a similar hypothesis, now demonstrate the contrary. Again, Dr. Emmet had published statistics of many hundred cases, from which he inferred that flexion of the body of the uterus was invariably associated with pain during the menstrual flow. Dr. Herman had made no distinction between the symptoms of congestive and obstructive dysmenorrhœa. If it were true, as held by Schultze, that permanent straightness of the nulliparous uterus is itself a proof of induration from chronic metritis, Dr. Herman's figures would be quite consistent with obstructive dysmenorrhœa being commoner among anteflexed uteri, for congestive dysmenorrhœa might be commoner among the straight. It was contrary to all physiological analogy to expect permanent distension of the uterus from partial obstruction of the canal, for in stricture of the urethra we found not a distended bladder, but a contracted bladder, with hypertrophied walls. It was a drawback that the statistics were taken from prostitutes, amongst whom congestive dysmenorrhœa might well so preponderate over obstructive, that all trace of the causation of the latter would be lost when no distinction was made between the symptoms. He thought the four preserved uteri cited, which might be cases of congenital anteflexion, insufficient to prove that anteflexion never caused obstruction; this should be decided by the fresh uterus. If it were suspended in a bottle by the fundus, gravity would diminish the flexion a little, and obliterate any flattening of the canal, even if it existed. It was contrary to his own experience that strongly marked anteflexion existed in nearly fifty per cent of nulliparous women; but, as Dr. Herman examined only by the bimanual method, his statistics perhaps applied rather to uteri which could be brought into anteflexion by pressure from above.—Dr. HEYWOOD SMITH thought that Dr. Herman had rather exaggerated the description of the uterine canal in anteflexion in saying that there existed a spur of tissue projecting backwards into the canal. The antecurve of the fœtal uterus was shown in a section of the pelvis in the museum of the Hospital for Women. Marion Sims' operation was not intended to straighten the uterus, but to cut a new and straight canal. His explanation of sterility with anteflexion was that the os was tilted forwards and lifted above the pond of semen that gravitated into the posterior cul-de-sac. In many cases frequent reposition of the uterus, and passing of a thick sound, relieved the dysmenorrhœa. Patients with anteflexion described the pain as preceding the flow, and being of a forcing character and felt in the hypogastrium.—The PRESIDENT complimented Dr. Herman on the excellence of the method which he had pursued in the study of this subject. It was a great point in his demonstration that the dilated uterus and the spur-like obstruction at the internal os, so frequently depicted, were never seen. No such specimen was described except from imagination, and none was found in museums. Specimens well described showed no dilatation of the

uterine cavity, and no spur, and he believed there was no obstruction. By statistics and by a mass of other evidence Dr. Herman had brought his opinions far nearer to proof than those had done who held other views. Much had been made of the condition of supposed obstruction. Now, a specimen of anteflexion with complete atresia or closure of the cervical canal was lately shown to the Society, and in it there was no spur and no dilatation of the uterine cavity. If there was only a small or very contracted passage there was still room enough for blood to pass freely, not only the few ounces in a few days of a menstrual period, but so much as to let the woman bleed to death in a short time. Along with Dr. Gamgee he had, some years ago, published a paper in the *Journal of Anatomy and Physiology* showing the facility of the passage of blood through capillary canals, and there was much clinical evidence to the same effect.—DR. HERMAN, in reply, said that he had not disputed the existence of obstructive dysmenorrhœa; but it did not follow that the obstruction was due to flexion. He had stated in his paper the precautions he had taken to prevent any bias due to preconceived opinion in his own mind from affecting the result. Dr. Hewitt's paper only showed that a number of invalids got well under the influence of rest and good diet. Dr. Emmet's statistics did not bear on the question, because he only examined patients who consulted him for some uterine trouble. It was possible that some of those he had himself examined might have dysmenorrhœa induced by their mode of life. Still, if anteflexion caused dysmenorrhœa there ought to have been a decided preponderance in the frequency of dysmenorrhœa among those whose uteri were anteflexed. In saying that stenosis of the canal should lead to dilatation of the uterine cavity he had only quoted what was stated and shown diagrammatically in many books, and the word "spur" or "promontory" was not his own, but was used in works of high repute. Theoretically, fluid would flow a little more readily along a straight tube than a curved one, but in the case of the uterus the difference would be infinitesimal. It was very rarely possible to distinguish congenital from acquired anteflexion. He did not know any way of diagnosing anteflexion so certain as bimanual examination. He did not think that in his cases anteflexion had been produced by the method of examination; if it were so it was remarkable that his figures agreed so nearly with those of other observers.

MIDLAND MEDICAL SOCIETY.

THE first meeting of the session was held in the Medical Institute, Birmingham, on Wednesday evening, Nov. 2nd. In the absence of the president Mr. Ross Jordan was voted to the chair. Forty members and visitors were present. The following gentlemen were elected members of the Society: Mr. E. Cocks Johnston, Dr. A. Harvey, and Mr. Pugh.

Mr. LAWSON TAIT showed a living case in which Laparo-enterotomy had been performed for intestinal obstruction. The operation relieved all the symptoms, and subsequently the fæces passed per rectum, the artificial anus gradually closing until a very small fæcal fistula on the right of the umbilicus alone remained. Mr. Tait was sanguine this would ultimately close.

Mr. TAIT also exhibited a large Vesical Calculus, removed from a woman who had been operated upon by another surgeon three years previously for vesico-vaginal fistula. After leaving the hospital where she had been treated all the old symptoms returned. An examination showed that a silver suture had been left *in situ*, that the urine dribbled through the openings made by the stretch, which also had acted as a starting-point for the stone formation. By enlarging the openings existing Mr. Tait was enabled to remove the suture and the calculus.

Mr. BENNETT MAY exhibited the following Tumours: 1. Cystic testicle, the result of traumatism. 2. Sarcomata of the mamma, parotid gland, and phalanx of great toe. 3. Tumour of bursæ.

Mr. TAIT then read a paper "On 110 Consecutive Cases of Abdominal Section" since November, 1880. The following is the analysis of the cases: Exploratory incisions, 14; removal of one ovary for cystoma, 38 (2 deaths); removal of both ovaries for cystoma, 9; removal of parovarian cysts, 4; removal of both ovaries and Fallopian tubes, 21 (2 deaths); opening and draining of pelvic abscesses, 11; hepatotomy, 4; Cæsarean section, 1 (died, child living); extra-peritoneal cysts 2 (both died); hysterotomy, 4 (2 deaths); enterotomy for intestinal obstruction, 2. Mortality 8·2 per cent. In cases where the operation had been undertaken for removal of a tumour none had been left uncompleted. The author thought three factors contributed to his success. 1. Increased personal experience. 2. Discontinuance of the use of the clamp. 3. A general improved condition under which operations were now performed. Tumours were detected earlier and sent for operation without being tapped. In some cases drainage had proved effective. Listerism had been given up as harmful. In cases of suppurative peritonitis, Mr. Tait thought that good might accrue from opening the abdominal cavity and freely draining it.—A discussion ensued, in which the following took part: Dr. Bassett, Mr. Thomas, Mr. Chavasse, Mr. Ker, Mr. Lloyd, Mr. May, Dr. Simon, Dr. Robinson, and Mr. Ross Jordan.—Mr. Tait having replied, the meeting terminated.

Reviews and Notices of Books.

Notes on Midwifery. Specially designed to assist the Student in preparing for Examination. By J. J. REYNOLDS, M.R.C.S. Eng. London: J. & A. Churchill. 1881.

THE title of this book sufficiently explains its aims; its preface enumerates the sources from which its contents have been drawn, and adds that its objects are three—(1) to methodise knowledge, (2) to refresh the memory, (3) to economise time. We are not at all sure that little books of this class, which become more numerous every year, can possibly be useful, but we are sure that if not very good they cannot fail to do harm. At the best they only aim at doing for the student what he ought meanwhile to have done for himself, and at the worst they tempt him to trust to a very objectionable form of "cram." They are, however, and will probably continue to be, favourites with the unambitious student.

The present volume of some 130 pages runs through the principal parts of midwifery most likely to be asked in ordinary examinations, in sixteen chapters. The print is good, and some of the pages convey at a glance a fair idea of the headings of the subject treated; but in others the eye meets a long list of words in Indian file without any true classification, and which can in no case aid either knowledge or memory. Towards the end of the book the chapters take on the form of long quotations *in extenso* from text-books. Thus the directions for the application of the forceps are given in Dr. Playfair's own words, excellent in their place, but too diffuse for the purpose of this book. A clear code of directions for each separate part of this process—a sort of drill—would really have been useful. This exemplifies a fault found all through the volume—a want of digestion; the classifications being mostly such as were already to hand, the author failing to our mind in adding clear lists of his own.

We pass, now, to the actual substance. The measurements of the pelvis are given to the tenth part of an inch. This is useless, as such measurements only profess an approximate general average, and have a value only relative to the equally variable measurements of the fœtal head. We are told (p. 1) that "in the cavity [of the pelvis] similar measurements [are taken?] *at the same level as the conjugate.*" This is equivalent to directing a tailor to measure a man for a coat round his head. On p. 2 we are told that "the conjugate diameter is longest at the outlet." The author seems to have an erroneous idea of the meaning of the word "conjugate," which is "the lesser diameter of an ellipse," and in pelvimetry is confined to the conjugate of the *brim*. On the same page the ordinary pelvic measurements are unnecessarily numerous and not well selected. On p. 3 "membranæ papillares" (occurring thrice) may, we suppose, be a printer's error. On p. 4 the bitemporal is measured "between

the ears." On p. 27, "the above signs [of recent delivery] are only found in women who have been recently delivered," this includes the abdominal striæ. On p. 77 (placenta prævia) the placenta is talked of as "attached to the whole circumference of the cervix," whereas the "cervix" should be "os internum," the placenta *never* being attached to any part of the cervix. On p. 131 parametric swellings are said to be commonly "between the folds of the broad ligament"; this is an old but not venerable error. We may add that "cholostrum" has no "h," that "forceps" is a singular noun, that the plural of "femur" is "femora," and not "femoris," and that the plural of "tuber" is "tubera."

We have freely criticised this book in defence of our rising students on the principle that the greatest reverence is due to boys, and that the blind ought not to be led out of their way.

A Treatise on Comparative Embryology. By FRANCIS M. BALFOUR, LL.D., F.R.S. In Two Volumes. Vol. II. London: Macmillan and Co. 1881.

WE welcome this volume as the completion of a work which reflects honour on our national science in general, and is a strong proof of the health and vitality of our older universities. Complete as the first volume was, our author is even more at home in the second, which embraces the parts of the subject more particularly investigated by him. It is rarely indeed that a subject of such importance and extent is summarised by anyone more than a mere compiler; and the close personal acquaintance shown by our author with most of the points dealt with in this work enables him to grasp his subject with masterly clearness and brevity. Our satisfaction and pride are, however, not unmixed with humiliation when we examine the list of authors put under contribution, and see how small a fraction of the total number either of works or of authors can be claimed by the richest and certainly not the stupidest nation of Europe.

It only remains for us to say that the printing, classification, and indices are all that can be wished, and that the figures (a large number of which are original) are beautiful, clear, and intelligible. We cannot too highly commend the work.

A Treatise on Orthopædic Surgery. By J. WARRINGTON HAWARD, F.R.C.S., Surgeon to St. George's Hospital. London: Longmans, Green, and Co. 1881.

THIS work, small as it is, has a very special value, for it is written by a general surgeon, who in his preface declares "that there is no good reason for the separate practice of orthopædic surgery." The teaching of the book is that the treatment of cases of deformity can be successfully undertaken by general surgeons, that there are no mysteries in it, and *not* that the writer of the book is alone able to cope with them. It is a fact that cannot be gainsaid, that the general body of the profession is profoundly ignorant of the facts of orthopædic surgery. This may be traced in part at least to the baneful influence of "specialism," that has flourished on this branch of surgery. We hope that Mr. Haward's book will be widely read, and that it will prove successful in correcting many of the errors now generally held in regard to the "special" nature of the diseases described. It ought to be useful in helping all properly qualified surgeons to undertake the charge of cases of deformity. There is no claim to originality in most of the matter, but the author's views on the mode of production and the treatment of lateral curvature of the spine are deserving of particular attention. He traces the more common primary form of scoliosis to muscular debility; the weakened muscles fail to hold the spine erect, it bends to one side, and then the muscles of one side are relaxed, whilst their opponents are stretched. The rotation he attributes to the special mode of attachment of the vertebral muscles by which, when only those on one side contract, a twist of the spine is induced. The treatment recommended may be summed up briefly in rest for the weakened muscles, alternating with moderate exercise and general tonic treatment. The common "spinal instruments" are condemned, and the apparatus recommended, when any is required, is to be made of Cocking's poroplastic felt.

A Manual of Diseases of the Throat and Nose. By F. H. BOSWORTH, A.M., M.D. 8vo, pp. 427. New York: W. Wood and Co. 1881.

THIS is the work of a professed specialist, and the author has been apparently not actuated by any desire to state his views concisely. There are 175 woodcuts, almost all of which are copied from other works or from tradesmen's catalogues. There is little, if anything, new, and the reader will be at a loss to conceive in what throat specialism really consists, seeing that every decently educated medical man will have already acquired in the course of his general reading nearly all the information contained in this laboured treatise. The treatment recommended for most of the complaints mentioned in the book is largely local and manipulative, and the author seems impressed with the idea that the one thing a throat specialist may not do is to trust to nature. For example (p. 72), "It is very much to be deprecated that, as a rule, an ordinary cold is allowed to take its course without treatment. If a part has once become inflamed [does the author think that 'inflammation' is part of a common cold?], and is permitted to undergo resolution without interference, it is left in a weakened condition, which invites renewed attacks from a very slight cause." In the treatment of chronic laryngeal catarrh the author recommends the application of medicine topically by atomisers, or by means of a brush or sponge, or cotton pellets, at the end of a probe. Solutions of nitrate of silver, chloride of zinc, sulphate of copper, alum, chlorate of potash, are all recommended. As the muscular tissue gets weakened in this condition the methodical use of the faradaic current is also recommended. According to our old-fashioned views chronic laryngeal catarrh is generally the expression of a constitutional state, and is best treated by the administration of specific remedies or tonics if the patient be weak and anæmic, or by a short course of purgatives if the patient has been over-indulgent in eating and drinking. If these measures fail, we should advise a mild sea climate for a season, and an escape from the spongings and sprayings, the probings and pokings, of meddlers who seem to us to be far too eager to rush in and "do something."

The Journal of Anatomy and Physiology, Normal and Pathological. Conducted by Professors G. M. HUMPHRY, W. TURNER, and J. G. M'KENDRICK. Vol. XVI., Part 1. October, 1881. London and Cambridge: Macmillan and Co.

THIS part contains the following memoirs: 1. Relation of Nerve Supply to Muscle Homology, by D. J. Cunningham, M.D. 2. Action of Duboisia on the Circulation, by George A. Gibson. 3. Cerebral Sinuses and their Variations, by J. F. Knott. 4. Primary Growth from Bone, resembling in some of its features Scirrhous Carcinoma of the Breast, by Gilbert Barling, M.B. 5. Reproduction of the "Feeler" of the Lobster's Antenna, by George Bond Howes. 6. Comparative Anatomy of the Lymphatics of the Uterus, by George Hoggan, M.B., and Frances Elizabeth Hoggan. 7. Case of Transposition of the Aorta and Pulmonary Artery in a Child of Seven Months, by Henry Ashby. 8. Some Points in the Histology of the Newt, by William Stirling. 9. Nerves of the Lungs of the Newt, by William Stirling. 10. Pelvimetry, by J. G. Garson, M.D. 11. Cranial Charac-

ters of the Admiralty Islanders, by W. Turner; and lastly, the Report on Physiology, by William Stirling.

Dr. Cunningham draws attention to the importance of observing the nerve-supply of muscles in order to determine their homology, and points out that this method is of greater value than attention to their position, origin, or insertion, all of which are liable to variation. Mr. and Mrs. Hoggan give many details in regard to the distribution of the lymphatics in the uterus. The vessels are arranged in more or less well-marked layers, which differ in different animals. In the mare no lymphatics are found on the peritoneal surface of the musculature, but there is a large development of lymphatics in the submucosa, and within the mucosa itself, vessels passing up to the epithelium of the inner surface of the uterus. The uterine glands, they find, have no connexion with the lymphatics either in the pregnant or in the non-pregnant uterus.

Quarterly Journal of Microscopical Science. Edited by Professors RAY LANKESTER, BALFOUR, THISELTON DYER, and KLEIN. Part LXXXIV. October. London: J. and A. Churchill. 1881.

THIS part contains the following memoirs: 1. The Organ of Jacobson in the Rabbit, by E. Klein. 2. On the further Development of Welwitschia Mirabilis, by F. O. Bower. 3. On the Structure and Significance of some Aberrant Forms of Lamellibranchiate Gills, by R. Mintschuri, of Tokio, Japan. 4. Limulus, an Arachnoid, by E. Ray Lankester. There is also a short note by Professor Lankester on Dr. Koch's new method of Pure Cultivation of Bacteria. None of these articles have a very direct bearing on medical science.

The Lancet Commission
ON THE
FOOD-SUPPLY OF LONDON.

No. II.

THE most important step towards reducing the price of food would be the suppression of the ring which is very generally supposed to exist both in the meat and the fish markets. But to accomplish this it is first necessary to prove positively that such a combination has been formed, and this will not be established except by a Parliamentary Committee taking evidence on oath. At present the most valuable witnesses would be ruined if they volunteered information, and the question can only be judged by inference. Still there is sufficient reasonable suspicion to warrant the placing of the markets under the coercion of a Government inquiry, with power to compel witnesses to give evidence on oath. Naturally, in the course of our inquiries, we have met with considerable divergence of opinion and much conflicting evidence; still the balance of testimony leans emphatically to the conclusion that if a ring has not been openly formed, with rules and meeting-place, and book of minutes, &c., there is, nevertheless, often an understanding by which prices are regulated and a fall in the value of food prevented. With respect to the fish market, there are many persons who strenuously deny that there is a ring, but the reasons given are not very satisfactory. One salesman of old standing argued that the "low cunning" characterising "the inferior class of men" who trade at Billingsgate would render combination difficult, and, in fact, impossible. If two or three men were to agree with one another as to the price they were to pay the fish catcher, one or the other would be sure to betray his colleagues, and send a larger sum so as to obtain in future the entire consignment. This plea is at least a humiliating confession. It does not mean that the salesmen are unwilling or too honest to form a ring, but simply that there is not enough honesty among thieves for the ring to hold out. Again, if three men agree on a certain price, and one acts treacherously and sends a larger sum, thus securing for the future the sole patronage of the consigner, it is very certain that once he has shaken off his competitors he will so lower his prices as to recoup himself for his previous extra outlay, and also make a large profit. However this may work, the result is always the same; the customer must pay heavily, and the producer must be content with very little.

In both the fish and meat markets there is evidently a tacit understanding which is as effective as if a ring were elaborately organised. It is to the undoubted advantage of salesmen to keep up the prices, as the labour of cutting, sorting, and selling is the same whether the fish or meat be dear or cheap. Indeed, these practices are so common that on one occasion we overheard a man angrily addressing a fellow salesman as he walked past us, in words of such suspicious meaning, that we at once noted them down. "No," he exclaimed, speaking in his excitement more loudly than prudently, "I will pay that much; I robbed the man before to oblige you, and I won't do it again." We also came across in the meat market the history of a consigner who sent meat up from Birmingham. One day he appeared in Smithfield, and, not being known personally by his salesman, attempted to buy some of his own mutton. This, however, he could not get under six shillings a stone, but a few days afterwards the salesman confided to him that the mutton had sold only for 5*s.* 8*d.*! Salesmen sometimes contrive to avoid close scrutiny by lending money to the breeders of cattle or the catchers of fish who send them consignments. But to protect the public interests, the salesmen ought to be perfectly disinterested; it is doubtful, however, whether this result can be obtained even if the salesmen were Government functionaries in receipt of good regular salaries. It was urged, on the contrary, that though a functionary might be paid as much as £1000 a year, still he would not object to an extra £500 if it could be easily obtained. If this be true, then it only remains to make it an act of felony for any salesman to have any personal interest in the result of the sales. In the meanwhile public and producer remain the victims of the middlemen. But in France, at least, the salesmen are professedly disinterested, and if any favouritism could be proved it would go hard with the culprit.

At Billingsgate a certain number of salesmen are not merely capitalists, but they have buyers on the coasts who purchase direct from the catchers. Should the catchers prefer to send their fish direct to London, it very probably reaches the same salesman who has been buying goods himself, and, of course, the latter sells his own purchases first and at the highest possible rate. If the representative of some fishermen or a new salesman came to Billingsgate with the fixed determination to get the highest price for the goods sent him, and to reserve for himself only the legitimate commission of five per cent. on the value of sales effected, it is much to be feared that he would soon be ruined by the unfair competition which would be brought to bear against him. The ring, or whatever combination acts in the stead of a ring, would soon ascertain from the carriers, &c., from what quarter the new salesman obtained his consignments. Then offers would be made to the consigners for their fish at higher prices than those which it was known the new salesman had given, and higher, perhaps, than the fish was worth. If this proved ineffectual, the members of the ring would propose to buy on the coast for ready cash, and on such advantageous terms that, in one way or the other, the new salesman would very soon find himself robbed of his business, his consigners one by one ceasing to send him any fish. At this, what Prince Bismarck, when starving out Paris, described as the propitious "psychological moment," the ring would give the newcomer to understand that, after all, they did not wish to prevent his doing business, but that it must be conducted on their terms and in their way; in other words, the newcomer must obey the unwritten law of the ring. These laws we take to be that by means fair or foul the prices must be kept up, that salesmen must enjoy other benefits than the mere five per cent. commission, and may be allowed to have an interest in the goods they sell. The smaller the market the more easy to impose the tacit acceptance of these laws, hence the tenacity with which the unsuitable site of Billingsgate is defended, and the illegitimate opposition made to other markets.

When, for instance, Columbia Market was opened for the sale of fish, the Billingsgate salesmen went up to the new market and there purchased the best they could find, notably some magnificent salmon, brought it down to Billingsgate, and there resold it, so as to leave the public and the trade under the impression that it was at Billingsgate and not at Columbia Market that the good fish was to be obtained. But Lady Burdett Coutts discovered another means by which, in default of better market accommodation, the price of fish might be reduced. A French invention, based on a solution of acetate of soda and glycerine, was brought to her notice that would preserve fish for an indefinite time. This was submitted to Dr. W. Sedgwick Saunders, the City medical officer, who not only reported most favourably on the invention, but himself ate mullet, smelt, and salmon which had been kept a month in this solution, and found these fish perfectly good. Thereupon Lady Burdett Coutts sent, at considerable expense, enormous quantities of this solution along the whole coast, so that fish might be preserved, waste, during a glut, prevented, and the supply better regulated. This, however, did not at all meet the interests of the trade, and they strenuously opposed whatever would tend to prevent profitable fluctuations, and, by avoiding waste, reduce the prices. The suppression of this very useful invention is a clear proof that the market is capable of a combined effort to maintain personal interests, even at the sacrifice of the public good. But for these illegitimate means the extraordinary and rapid acquisition of wealth on the part of men who theoretically are supposed to receive but five per cent. commission on the sales effected would be inexplicable. Then there are innumerable stories told of consigners discovering, by the assistance of friends who have watched the markets, that goods were sold at higher prices than they received. Many a dispute has been the result, and several creditable witnesses have even assured us that many salesmen keep a double set of books, one for themselves and one for the consigner, should he ever insist on inquiring into details.

The fish catchers are by these combinations deprived of about fifteen per cent. of their hard-earned profits; otherwise the number of fishermen would be more readily augmented, and a greater quantity of fish caught, an advantageous result for the general public. At present, however, the abuses practised at Billingsgate tend to divert a portion of the supply that does exist. Many catchers who are near enough to send fish to London find it pays better to supply Birmingham and other inland markets, while not a few have successfully tried Paris and various large continental centres.

According to some persons boats are detained in the Thames sometimes till the fish rots, so that a fall in the market prices should not be induced by too great a supply; but we have met with no substantial evidence in support of this accusation. On the contrary, we know, as a fact, that only one per cent. of the fish brought to Billingsgate was confiscated as unfit for food, and of the quantity seized sixty per cent was shellfish. But from Grimsby the price of cod-fish can certainly be regulated. Here the fish is kept alive in huge tanks or boxes that float about the harbour. Men leap into these tanks, standing with the water breast-high, and carry out in their arms the fish required. These are not killed, but merely struck on the head with a mallet so as to stun them, and then packed in cases and sent to London. Here they will survive the journey for about twelve hours; and provide what is known as "crimped cod." This means that the cod is cut into slices while still alive so that the muscles shrink and are convulsed by the operation, thus producing the irregular crimped slice which is the delight of connoisseurs. Perhaps before interfering with indispensable and beneficent research, the Anti-vivisection Society might have turned its attention to this wholesale practice. We doubt whether the mallet of the Grimsby cod-dealer can be considered in the light of an efficient and humane substitute for the use of anæsthetics, or that the difference in flavour between crimped and ordinary cod is a sufficient reason to justify the practice of vivisection by every fishmonger.

Other points that tend to maintain the high price of fish have already been insisted upon, and we are glad to note a general outcry against the catching of the young fish indigenous to our coasts. By burning the candle at both ends, destroying the parent and the spawn, the supply must of course become exhausted, and this is what is actually taking place with all but the migratory breeds. It is as indispensable that young fish should be protected as young game.

In conclusion, we would urge the appointment of a Royal Commission which would tend to break up, by rendering public, the action of the ring. The crowding of Billingsgate must be condemned, and a large new market built in its stead. Perhaps the site at Blackfriars advocated by Mr. Rudkin is the best; in any case it is the largest, and by compelling the Billingsgate salesmen to leave their old quarters, might also make them abandon some of their old customs. But any one market, however large, should not be the sole master of the situation. There is no reason, for instance, why a large quantity of the cheaper fish should not be disposed of at the railway stations on arrival, without going to the market at all. This is done with milk to a very great extent, but the practice is not yet so general with regard to fish. It would also be a great saving if the fishmongers could have the fish consigned direct to them by the catchers, especially those whose business is in the outlying districts, and as the railway companies deliver meat for 2*s.* 6*d.* a ton direct into the meat market, fish might be brought on equally advantageous terms into the fish market, but the charge at present is 5*s.* the ton.

The present system of distributing fish is, in a word, fraught with so many obstacles, some accidental and others intentional, that in spite of all the natural advantages England possesses fish is exorbitantly dear, and the Corporation of London unreasonably slow in its efforts to remedy this evil. The voice of public opinion and the power of Parliament must therefore be brought to bear so that the people may once more enjoy the wholesome and plentiful food that Nature has placed within easy reach.

GLASGOW OPHTHALMIC INSTITUTION.

THE important additions recently made to the premises of this institution were formally opened on Monday last. Since the institution was established in 1870, the demands made upon it by the public have rapidly increased; the number of patients treated during the first year was 119 indoor and 1257 outdoor; last year the numbers were 373 indoor and 3229 outdoor; while altogether no fewer than 34,000 persons whose sight had been impaired by accident or otherwise had been operated on or advised. The need for extension thus became evident, more especially as for several years it had been found impossible to give the accommodation requisite for the treatment of all the indoor patients. The additional accommodation now provided gives ten more beds, making thirty in all, with day-room for males and another for females, dining-room, bath-room, and operating room. It is interesting to note that from the very commencement the working classes of the city have borne a very considerable share in the maintenance of the institution, their subscriptions last year amounting to £623, as against £348 from the general public. The present alterations are estimated to cost £2067, a sum which has already been raised through the liberality of the Earl of Stair and nine other gentlemen. At the formal opening meeting the Earl of Stair spoke of the interest he had always taken in the success and welfare of the institution. Having a very great regard, he might say affection, for his friend Dr. Wolfe, who did him a good turn once, it gave him great pleasure to be present to meet the wishes of the directors. He had to move, "That this meeting congratulates the citizens on this important extension to the institution; and in view of the necessarily increased expenditure for maintenance, commends it to the liberality and support of the community."

Dr. Wolfe subsequently distributed the prizes to the students in the clinical classes; and the usual votes of thanks having been awarded, the proceedings terminated.

SALFORD ROYAL HOSPITAL AND DISPENSARY.—The report read at the annual meeting of the trustees and friends of this institution showed a balance on the wrong side of £768 10*s.* 2*d.* It was stated that all cases (except the accident cases) admitted into this charity are submitted to the examination of the Manchester Provident Society, whilst some who are considered capable of paying an ordinary medical man, or of joining a provident dispensary, are refused attendance.

THE LANCET.

LONDON: SATURDAY, NOVEMBER 12, 1881.

THE growing authority of Medicine makes it more important than ever that those who practise it should recognise the great system of Ethics by which medical men have been bound since the days of HIPPOCRATES. That great man showed his sagacity not less in the moral principles which he enunciated than in his observations of disease and in his suggestions for its cure. We revert to this subject because the Corporations of late years have acted as if their ethical functions were altogether in abeyance, or neglected, on account of commercial anxieties arising out of hard competition involved in nineteen licensing bodies. A medical man may advertise; he may disparage or undersell his neighbour; he may bring the profession into contempt by unprofessional proceedings; he may imitate the ways of small tradesmen; he may proclaim himself the proprietor of a secret remedy for incurable cases—may do all these things, or any of them, and have his behaviour unchallenged by the Corporation whose diploma he holds.

The consequence of the apathy of the examining bodies in regard to the unprofessional conduct of their members is the loss of respect of those who honour the great principles of professional conduct. In other instances, those who see this apathy say, that, as there is no longer a court of appeal or rebuke, high professional conduct is either impracticable or unprofitable, and, with some misgivings at first, they come to imitate the conduct which formerly they condemned. If this tendency is not resisted, if the Corporations continue to be absolutely careless of the conduct of their associates after receiving their fees, it is inevitable that the whole platform of professional conduct will be lowered, and with it the mutual esteem of medical men. The amenities of professional neighbourliness will be exchanged for the rivalries of struggling shopkeepers.

It is extremely important, in the interest of the public, that the moral functions of the examining boards of the future should be strengthened. The Royal Commission would do well to consider the reasons why the medical Corporations were originally endowed with censorial powers, and why these have been permitted practically to lapse. It is not merely that medical men who act unprofessionally may injure their brethren and their profession by lowering it and them in the estimation of the vulgar. We must consider further the bearing of unprofessional conduct, and of the abeyance of any censuring authority on the public itself. We have said above that the growth of the authority of medicine gives additional importance to medical ethics. Medical men have always had moral relations and duties towards their patients. The patient for the time being is at the mercy of his medical adviser. In the seclusion of the study or the sick room the medical man has no rival and no check. He is often the depository of secrets which are kept from the nearest relative, and from the minister of religion. Not women only, but strong men, are in a position of inferiority in such circumstances. It was always so; but it is so now more than ever. The growth of specialism has greatly added to the dependence of a patient on his medical adviser, and increased the importance of superiority to all meanness and to all selfishness on the part of the doctor. Formerly if a medical man used his power to magnify his own importance, to intimidate his patient, or to make him feel that his very life depended on his knowledge and skill, it was always possible that the influence of the exaggerating and unworthy practitioner would be counteracted by another practitioner equally authoritative. But the growth of specialism has very much altered this. Men set themselves up as the monopolists of knowledge and of instruments. They explore the hidden parts of the body, and make declarations of what they see, which at any rate cannot easily be contradicted. On the strength of these declarations they pronounce certain costly courses of treatment to be necessary. In other instances, if we are not strangely misinformed, they recommend procedures in the way of conduct contrary to all morals, professional or religious. If their advice excites surprise or occasions inconvenience, they reiterate their oracular conclusions, coupled with an intimation that they are "the men," and that the supreme wisdom on such subjects rests with them, thus half intimidating the patient into compliance with their demands. We do not say that this evil of the growth of the authority of medicine is very extensive, but it is real, and it will grow if the ethics of medicine do not keep pace with the science of it. It is just as essential for the highest specialist to be checked by considerations of a moral character as for the proprietor of an open surgery. The code of ethics exists mainly in the traditions of the profession and in the lofty examples of it which are to be found in every neighbourhood and in every sphere of practice. It has dropped out of medical education, and it is scarcely heeded by the Corporations. It is our present object to revive attention to its claims as needed alike for maintaining the respect of the public for the profession and of medical men for each other.

THIRTY-ONE years ago Mr. SOLLY stated in a lecture published in our columns that rupture of the bladder was an accident of extreme rarity, and that in the course of twenty-eight years' experience at St. Thomas's Hospital he had only seen one instance of it. In the same year several examples were shown at the Pathological Society by Mr. C. HAWKINS. Seven years later, M. HOUEL, in his graduation thesis, while able to collect forty-four cases of true rupture of this viscus, in which the laceration of its coats was not inflicted from without by a splinter of bone or some such object, was yet unable to refer to any account of the accident longer than a few lines, and he indeed was the first who entered at all fully into its etiology. He separated his cases into two categories: the traumatic (thirty-seven) and the idiopathic (seven). He affirmed that the accident never occurred unless the bladder was more or less distended, and that the mere pressure of retained urine was never able to burst the viscus unless its walls had been softened by disease — inflammation and gangrene, — or pouched out into herniæ devoid of muscular covering. Subsequent investigation has in the main confirmed these views. Of late years surgeons generally have evinced more in-

terest in this accident, and its causes, signs, possible results, and treatment have been often discussed, and are well described in surgical text-books. M. BARTELS has collated the largest number of cases (169), and his paper is the best source of information as regards the statistics of the lesion.

It has been abundantly demonstrated that an essential predisposing cause is more or less distension of the bladder, which not only acts in fixing the bladder wall, but also raises the fundus above the pubes, where it is exposed to more direct injury, and tilts the posterior wall of the bladder back against the projecting lumbo-sacral angle. Alcohol has a double influence in predisposing to this injury, for it causes an increased and rapid secretion of urine and quick distension of the bladder, and it also deadens the sensitiveness of its mucous membrane, and the call to micturate is so feeble that it is disregarded by the drunkard and the distension allowed to increase; it may also possibly soften and weaken the muscular fibres of the bladder. The most common exciting cause is a blow or fall upon the hypogastric region, though in a case recorded in the *Gazette des Hôpitaux* the man fell from a second-floor on to his feet, and in another case of Mr. HAWKINS'S the blow was on the back.

Although HOUEL speaks of cases in which the bladder was ruptured by the force of the abdominal muscles during parturition, an examination of those quoted in support of the assertion shows them to be capable of bearing a much more plausible explanation. Thus, in one case, Mr. WILKINSON'S, the rupture occurred after the delivery of the head by forceps, and when the birth of the shoulders was being accomplished by very strong traction. Indeed M. BARTELS, out of a much larger number of cases, is not able to point to one in which it could be distinctly shown that the firm pressure of the anterior belly muscles—the rectus and pyriformis—had burst the bladder. M. ASSMUTH, in the twenty-second number of the *Petersburger Medic. Wochenschrift*, has, however, published the histories of two cases in which the lesion was thus caused, and as they establish a point hitherto denied, or considered not proven, we must state the facts of the cases very briefly. The first case occurred in a man who had not micturated for five hours, and then, while lifting a heavy weight, felt a severe pain in the lower part of the belly, and afterwards was unable to pass water, but instead passed a few drops of blood. At the autopsy a rent was found in the back of the bladder two centimetres and a half long. The second case occurred in a man forty years of age, who after lifting a heavy weight was unable to pass water, collapse ensued, and fatal peritonitis came on. Here, too, at the autopsy a rent some three centimetres long was found in the back of the bladder, the edges being somewhat thickened. It is difficult to escape the conclusion that in these instances the violent contraction of the recti muscles was the rupturing force, and that this cause of burst bladder must therefore be added to those already acknowledged.

Cases of idiopathic, or spontaneous, or non-traumatic rupture of the bladder, present also certain features of special interest. That, at any rate in the large majority of cases, the bladder had been previously softened by disease, or rendered abnormally weak in some one or more situations by hernial protrusions of its wall, there can be no doubt. Experimenting with fresh, healthy bladders, HOUEL found that they resisted distension pressure until it amounted to one atmosphere, or fifteen pounds to the square inch; in these cases the mucous lining of the bladder appeared to tear first. Others have thought that the fact that the rent in non-traumatic rupture is very nearly always in the peritoneal covered surface of the bladder is explained by the non-extensibility of the peritoneal coat, which ruptures first.

A case of intra-uterine rupture of the bladder, in a four-months' fœtus, with imperforate urethra, was published in Guy's Hospital Reports, in 1837, by Dr. KING, and after attention was directed to the subject, several similar cases were recorded by COCK, LEE, and MALGAIGNE. In KING'S case the rent was at the fundus, and its edges were thin, the rest of the bladder being hypertrophied. The rupture of an ulcerated or gangrenous or sacculated bladder is easily understood, and mere over-distension of a previously healthy viscus, especially with irritating urine, may cause this ulceration or gangrene, and thus indirectly induce rupture. The sacs sometimes found pouching back in the bladder are to be distinguished from the depressions between the projecting bands of muscle in a fasciculated bladder, and particularly by the fact that they are really hernial protrusions of the mucous membrane through the muscular coat, and that their walls are composed only of peritoneum and mucosa, both delicate structures. They are formed when there is some chronic obstruction to the emptying of the bladder, and are the weakest points of resistance, should the obstruction become complete.

Dr. MACEWEN has recorded in THE LANCET, vol. ii., 1873, a case of fatal rupture of the bladder in a young man nineteen years of age, in which there was no evidence of any previous change in the bladder or obstruction to the outflow of urine. He had been very drunk, and was put to bed to sleep off his drunkenness, no attention being paid to his bladder, and it was found afterwards that this accident had occurred. It is only very rarely that the bladder ruptures from obstruction. After the tension of the confined urine has risen to a certain point, the outflow from the ureters is checked, and probably the rate of secretion by the kidneys lessened. But further, in cases of enlarged prostate dribbling past the obstruction usually occurs, although AMUSSAT has recorded a case, and HOUEL five cases, where the bladder ruptured. Still more rare is this accident in cases of stricture of the urethra, for there rupture of the membranous urethra—a weaker part—occurs first. But HARRISON has recorded one case of this accident from stricture. In the female, retroversion of the uterus has led to this result. And in both sexes the muscular softening that occasionally occurs after typhus fever has affected the bladder so much, that where care has not been taken never to allow the organ to become distended, it has given way.

THERE would seem to be some reason to fear that the progress of civilisation is travelling the course of a vicious circle. Side by side with tokens of intellectual advance and moral enlightenment are to be found unmistakable evidences of the rapid and marked development of exceptionally evil qualities in the natures of individuals who have certainly not been left out of the swiftly moving current of progress, but have turned its advantages to their own and their neighbours' injury. A girl thirteen years of age, having more than

average intelligence, has drowned a child committed to her charge, apparently with no stronger motive than the desire to save herself the trouble of nursing it. A young man in his twenty-second year, fairly educated, if not in a certain way gifted, has elaborately planned and brutally executed the murder of an old man, solely, as it would appear, to possess himself of a small sum of money to supply his immediate necessities. And, perhaps for the first time in modern history, a party of young girls, barely in their 'teens, would seem to have organised themselves as semi-professional housebreakers. These crimes shock the moral instincts of the community, and the manner of their commission, and the bearing of the criminals after detection, occasion astonishment. Let us see whether what we think strange is not, in fact, perfectly natural—that is to say, natural to the abnormal conditions. There have, of course, in all ages and stages of national progress and racial development, been isolated instances of precocious wickedness; but we think it must be conceded, on consideration, that the story of recent crime—from which we have cited only three of the latest examples—furnishes proof of exceptional depravity. In truth, without adducing the detailed arguments by which we arrive at this conclusion, it may be suggested that the general effect of our high-pressure method of forcing the growth of intelligence by education must needs accelerate the development of bad as well as good mental organisations. The sun shines and the rain falls on the evil as well as the good, and the total result must be to produce a sprinkling of preternaturally developed offences and offenders. The psychologist who studies mind in the light of physiology—and how or where else can it be studied?—knows that it is from the evil tree we get evil fruit, and the stronger the fostering influence brought to bear on the population as a whole, the larger must be the total number of bad fruit-bearing growths which will be brought into prominent activity. It is therefore probably surprising that the total product of crime under our present educational system is not greater than, instead of so large as, it is. Those who regard education as a panacea for all the faults of human nature, must be woefully ignorant of its power and method of working. If it leads out the good, it must also lead out the evil. It may, and happily does in the majority of cases, happen that training, under the benign influences of civilisation, fosters the growth of parts of the nature which hold its passions in check; but when these parts, which should be protective and ennobling, are themselves corrupt, their development is likely to result in the formation of a peculiarly bad and malicious character. Culture is not in itself goodness. There may be cultivated goodness or cultivated wickedness, and in the cases of individuals with mental organisms in which there is little if anything but bad seed to cultivate, the higher the degree of cultivation the greater will be the growth of evil. Nor is it in the least degree remarkable that persons who, whether young or old, commit crimes like those which are now creating so much astonishment should appear "insensible" in the painful condition in which they are afterwards placed. They are not *insensible* in any true sense. They perfectly understand and feel their position, but they possess the power of self-control which enables them to disguise their feelings. Their emotional natures may even be highly developed, but they are under constraint. They are acting a part which is so far congenial that it is in harmony with their sentiments. They have no moral instinct to beget shame or remorse. Later on, when death stares them in the face, there may be fear and simulated repentance, but there will be no change of nature. Chagrin, terror, the sort of regret which is sorrow not for wrong-doing, but for having been discovered, may be evinced, but repentance in any true sense is not experienced. Nothing short of a long educational process could so call out the suppressed or undeveloped parts of the nature as to place criminals of this class on the footing of ordinary minds, and the interval between sentence and execution does not give time for such a process. In the case of the girl MESSENGER, who will not be hanged, there may in after years be some improvement, though looking to the utter absence of pity in her nature at the age she has already reached, the subsequent appearance of this and other like qualities seems improbable. LEFROY will die as he has lived, despite any affectation of amendment he may put on. The lesson for society is to look to the method of its educational influences. If nothing more than the *educing* of what lies in the inherited nature be attempted, it can rarely chance that a defective or bad organism will fail to be increasingly evil as its constituent vices are called into activity by "culture," side by side with such meagre virtues as it may happen to possess.

IN the blood of patients suffering from malarial poisoning, M. A. LAVERAN has found parasitic organisms, very definite in form and most remarkable in character. Some were cylindrical curved bodies, pointed at the extremities, with a delicate outline and a transparent body, colourless except for a blackish spot in the middle, due to pigment granules; on the concave side a fine line could often be traced, which seemed to unite the extremities of the crescent. These bodies presented no movement. Spherical organisms were also seen, transparent, of about the diameter of a red blood-corpuscle, containing pigment grains which, in a state of rest, were often arranged in a definite circle, but sometimes presented rapid movements, and then lost their regular arrangement. On the borders of the spherules very fine filaments could often be perceived in rapid movement. These filaments were in length three or four times the diameter of a red corpuscle. Their number varied. Sometimes three or four were seen around a spherule, to which they communicated an oscillatory movement, displacing the adjacent red corpuscles. The free extremities of the filaments were slightly reflexed. When at rest the filaments were invisible on account of their tenuity and perfect transparence. These mobile filaments appeared finally by becoming detached from the pigmented spherules, continuing, however, to move freely amidst the corpuscles. There were also bodies of spherical or irregular form, transparent or finely granular, about the hundredth of a micro-millimetre in diameter, containing dark-red, rounded pigment grains, either regularly arranged at the periphery, or aggregated at some part of the spherule. The bodies and granules were both motionless. These appear to be the ultimate or "cadaveric" stage of those last described. They have no nuclei, and do not tint with carmine, a distinction from the pigmented leucocytes, with which they have hitherto been confounded. Lastly, spherical elements

BEST COPY

were met with similar to those already described, but much smaller in size, and apparently representing a stage in their development. The animated nature of the mobile pigmented spherule, furnished with filaments, appears indisputable. M. LAVERAN regards it as a form of animalcule, which exists at first in an encysted state, and in the perfect condition becomes free in the form of mobile filaments, a mode of development not uncommon among the lower organisms. Besides these organisms, the blood of patients suffering from malarial fever contain—(1) red corpuscles, which appear to be vacuolated at one or two spots, and contain pigment granules; (2) pigmented leucocytes; (3) free pigment granules, possibly proceeding from the destruction of the parasitical organisms.

These elements were first discovered by M. LAVERAN a year ago, and since then he has examined the blood in 192 patients affected with various symptoms of malarial poisoning, intermittent and continued fever, and palustral cachexia, and found the organisms in 180. The disease had been contracted for the most part in different regions of Algeria and Tunis. He convinced himself, by numerous and repeated observations, that these organisms are not to be found in the blood of persons suffering from diseases that are not of malarial origin. In most of the cases of malaria in which the examination yielded a negative result, the patient had undergone a course of treatment with quinine, and to this fact the absence of the organisms from the blood was probably due. The addition of a minute quantity of a dilute solution of sulphate of quinine to a drop of blood was found at once to destroy the organisms. In all the examinations great care was taken to preclude the entrance of any extraneous objects into the drop of blood examined. In general the parasitic bodies were found in the blood only at certain times: a little before, and at the moment, of the accession of the fever. In some very obstinate cases the organisms were always present in the blood. They rapidly disappeared under the influence of a quinine treatment. It is conjectured that in the apyrexial intervals the organisms probably sojourn in internal organs, especially the spleen and the liver. After death from malarial disease, pigment granules are found in great numbers in the blood, and especially in the small vessels of the spleen and liver; and they may be, in the most severe cases, so abundant that not only the spleen and liver, but the marrow of bone, and even the grey substance of the brain, are darkened by their presence These pigment granules, which may obstruct the capillary vessels, appear to be derived from the parasitic elements, which perish after death, and become then unrecognisable.

IN two recent leaders *The Times* has brought prominently to notice the injurious influence exercised upon the Army by the obstructive policy of the Horse Guards in not carrying out the system of promotion by selection to the higher posts. It has pointed out that notwithstanding the very heavy expense incurred by the abolition of the purchase system, one of the great objects of that measure, "to enable the authorities to promote an officer for his fitness for the post to which he might be advanced," has not been realised. It is well known that the Duke of CAMBRIDGE has always set his face against promotion by selection, but while he continues to hold the chief command of the Army he is bound in honour to carry into effect the principles and regulations laid down by the responsible advisers of the Crown for its administration. If he considered these principles to be subversive of the best interests of the service and to be incompatible with an efficient discharge of his duties, and if he were unable to convince the War Minister of the soundness of these views, the alternative lay before him of retiring from his high and responsible position, or of sacrificing his personal views to those of her Majesty's Government. But it must be manifest that to retain the command while he allows his subordinates in all possible ways to thwart the operation of the system he is called upon to work, is a course incompatible with the obligations of his high rank, position, and character. In commenting upon the successful opposition of the Horse Guards to the Ministerial policy of promotion by selection to the higher grades, *The Times* observes, "In the Navy, in the Civil Service, and even in the non-combatant branches of the Army itself, where selection is the rule, the State is well served." But we fear that there is an error involved in this statement, so far, at least, as the Medical Department is concerned; for though selection is the rule of promotion above the rank of Surgeon-Major, it is no secret that the choice made by the head of the department is frequently overruled by the Horse Guards, and also that officers are occasionally promoted who are not recommended by the Director-General. Thus promotion is regulated not by the responsible head of the department, who is most likely to know the men best qualified for administrative duties, but according to the will of the Commander-in-Chief, who knows little about them, and who, there is reason to fear, is too often influenced in his interference by political pressure. To what extent this is carried it is impossible to say, but it is pretty generally known in the Medical Department that certain promotions are made and others delayed, if not altogether prevented, by the interference of the Horse Guards. That there should be a control over the recommendation of the Director-General may be freely conceded, but that control ought to be limited to the power of calling upon him to justify his selection, or his passing over of an officer, and should certainly fall short of the power to promote men whom he considers ineligible, or to refuse promotion to those whom he selects, unless upon the assignment of good grounds which ought to be duly recorded. The capricious interference of the Horse Guards with the *personnel* of the department has long been a cause of discontent among the medical officers, and it was hoped would be got rid of under the new organisation; but if we are correctly informed this is still a "consummation devoutly to be wished." We most sincerely trust that the discussion by the Press of the important subject of promotion in the Army may have the effect of leading His Royal Highness to carry out honestly and firmly the principles laid down for his guidance in the recent legislation, and to put an end to the system of obstruction which has hitherto been successfully worked by the staff of the Horse Guards. The country has decided upon the principles by which the military service is to be regulated, and will insist upon these being acted upon, even if in doing so it should be found necessary to apply to the highest administrative appointments the principle of a "fixed period" and of compulsory retirement, which have been so freely enforced in the case of officers in the lower grades.

BEST COPY AVAILABLE

Annotations.

"Ne quid nimis."

THE UNIVERSITY OF LONDON.

THE Senate of the University of London has recently passed a most important and salutary resolution, intended to overcome an abuse which has assumed rather large proportions. It is notorious that many undergraduates who have passed the first examinations for degrees has either directly assumed or allowed it to be implied that they are possessors of the full degree, and the Senate has been compelled to alter the designation of the primary examinations in order "to protect the just rights of the graduates of the University." Copies of the resolution embodying this alteration have been forwarded to all teaching bodies and colleges in order that in future the new title shall be used in their calendars. The resolution runs as follows:—"That the First B.A., First B.Sc., First LL.B., First M.B., and First Mus. B. examinations be henceforth respectively denominated the intermediate examinations in Arts, Science, Laws, Medicine, and Music." Instances of the abuse of the title "First M.B." by unscrupulous persons will no doubt occur to many of our readers, and we feel sure that the action of the Senate will be approved by the medical faculty, however much the occasion for it may be regretted.

THE REGISTRAR-GENERAL'S QUARTERLY RETURN.

THE Registrar-General reports in his Quarterly Return, just issued, that the public health of England and Wales, judged by the rate of mortality, was fully as satisfactory during the three months ending September last as it had been in the first two quarters of the year. The death-rate did not exceed 16·7 per 1000, and was lower than in the third or summer quarter of any year since civil registration commenced in 1837, with the single exception of 1879, when the rate was only 16·3. The death-rate last quarter was no less than 3·7, or nearly a fifth, below the average rate in the summer quarters of the forty-three years 1838–80, implying, the Registrar-General tells us, that "more than 24,000 persons survived the three months who would have died had the death-rate corresponded with the average." The death-rate in the first nine months of this year has been exceptionally low, the mean being 2·4 per 1000 below the average for the corresponding period in the past ten years, and if the rate in the current and last quarter of the year does not exceed the average (and it will probably be considerably below the average), the English death-rate in 1881 will not exceed 19·6 per 1000, and will be by far the lowest on record. The low death-rate last quarter was in great measure due to the small fatality of infantile diarrhœa, caused by the low temperature in August and September; but the decline in the death-rate was not confined to infancy. The mortality at all ages was 15 per cent. below the average rate in the ten preceding corresponding quarters. This decline, which was equal to 18 per cent. among infants under one year of age, was 13 per cent. among children and adults aged between one and sixty years, and was 5 per cent. among persons aged upwards of sixty years. If we consider the causes of death, we shall find further grounds for attributing the decline of the death-rate to generally improved sanitary conditions. The fatality of the principal zymotic diseases was exceptionally low. The marked decrease in the mortality from diarrhœa, scarlet fever, whooping-cough, "fever," and measles, was very far from counterbalanced by a small increase in the fatality of small-pox and diphtheria. The death-rate from "fever" (principally enteric), a trustworthy index of sanitary condition, corresponded with the low rate in the summer of 1879, and was lower than in any other summer quarter on record.

PARADOXICAL AND FICTITIOUS TEMPERATURES.

EVER since the Clinical Society, and indeed all clinical observers, were startled some seven years ago by the narration by Mr. John Teale of a case in which the temperature of the body attained extraordinary levels, without much apparent discomfort to the subject or much manifest derangement of other functions, attention has been directed to the possibility of the occurrence of such phenomena, and to the likelihood of their being explained by voluntary deception on the part of the patient. The probabilities in favour of such deception seemed so strong, to preponderate so much over the other chance that they were physiological aberrations, that it is not surprising that even Mr. Teale's case may have been regarded by many as really a fictitious one. When that case occurred we took occasion to point out what knowledge was then possessed as to the most extreme point to which the bodily temperature could rise compatibly with life, and to remark that the highest temperatures recorded were those which sometimes occur in grave disorder of the nervous system at the approach of dissolution, or even after somatic death, as Dr. Harley stated the other evening. But before Mr. Teale's case no such extreme thermometric levels had been registered in any human subject since clinical thermometry has been studied; and although the extreme fluctuations of the readings in that case, and their total independence of any pulse variations, seemed to place it in a distinct category hitherto unexplored, the question of its *modus operandi* remains to this day in the dark. For it would be obviously unjust to fall back upon the suspicion of malingering in that case, from the light gained in the others related at the last meeting of the Clinical Society by Drs. S. Mackenzie and Mahomed. Mr. Teale's case remains paradoxical, though it may well be not fictitious; the latter cases were undoubtedly fictitious as well as paradoxical. They were, moreover, highly instructive, for they taught us this: that a patient may be subjected to the close surveillance of a hospital, with all its circle of ever-watchful nurses and clerks, and yet may succeed in duping the observers, if not as to the fact that their observations were false, yet as to the precise manner in which the falsification was effected. The methods of malingering grow with the growth of science, and it could hardly be expected that the thermometer should be free from their invasion, especially seeing how easily its readings may be artificially varied—the more easily the more perfect and more delicate the instrument. Dr. Mahomed's observation, that in his case the temperature never rose when a non-registering thermometer was used, but only when one with a self-registering index was employed, was of itself almost sufficient to suggest the presence of artifice; but when we read of the accumulated tests so patiently applied by Drs. Mackenzie and Mahomed and their coadjutors, the conclusions they arrived at seem irresistible. There is no need to recapitulate the evidence they obtained, but there is something almost ludicrous in the fact, which has since been elicited, that the patient in Dr. Mackenzie's case has "confessed" how she managed to trick her doctors. She used simple enough means; but so do the conjurors in their baffling tricks, and many "educated hospital patients" are as clever in the arts of deception as any professor of legerdemain. Physicians, then, will learn from such records the important lesson to exclude every possible source of fallacy before concluding that they have before them a veritable *lusus naturæ*; and whilst always ready to admit, with Dr. Harley, that we have much yet to learn concerning the temperature of the body in health, as in disease, they will be additionally careful not to

attempt an explanation of paradoxes which have no real existence.

THE DRAINAGE OF THE DEANERY.

AN unpleasant impression is prevalent that Dean Stanley's death was perhaps accelerated by the unsatisfactory condition of the drains at the Deanery. On such a question it would be impossible to lay down the law, but our inquiries have led us to the conclusion that the drains were not in a safe condition. How far this affected the reverend Dean's health it would be difficult to say; but the defect was so far self-evident that some twelve months before his fatal illness the drainage of the Deanery was minutely examined and fully reported upon. In olden days there were brick drains which were probably little better than elongated cesspools, but these were all removed eighteen years ago and pipe drainage introduced in their stead. On the whole, for an old house, the Deanery was fairly well drained, but it had the faults inherent to all buildings in which the most modern phases of drainage have not been adopted. There was no thorough ventilation of the drain-pipes; there was no intercepter to break off the connexion between the house and the public sewers. In the closets the old pan container was still used, and this state of things occasioned at times, we believe, some slight nuisance. Finally, there was one closet badly situated and ill ventilated, close to the library; and it is most probable that the Dean when at work breathed a certain quantity of sewer gas. It is most unfortunate that this state of things was allowed to exist, for now the suspicion will always remain that the valued life of one of our most eminent divines was prematurely brought to a close by ineffectual trapping and want of ventilation in the house-drains. The warning has, however, been taken to heart by the new Dean, and Dr. Bradley has caused the premises to be drained anew. This work has been entrusted to Mr. E. F. Griffith, C.E., whose name in connexion with sanitary matters is well known, and who will certainly rectify the errors existing in the old system.

IMPORTANT INQUEST ON A LUNATIC.

IT is provided by statute that her Majesty's Coroners shall receive notice of every death occurring in a lunatic asylum, a workhouse, or a gaol. Under this regulation the Coroner for Birmingham received notice that David Pullan died at the Borough Asylum on the 13th ult., from peritonitis of about seven days' duration, the patient having been admitted into the institution three days previously—Monday, Oct. 15th. An inquest was ordered, and a precept for the post-mortem examination issued to Mr. Sampson Gamgee. This gentleman, assisted by Mr. Cocks Johnstone, conducted the autopsy on the 14th ult. in the presence of the medical officers of the asylum, who had received due notice. At the inquest, which, in the absence of Mr. Hawkes, the Borough coroner, was held by his deputy, Mr. Weekes, there was practically no discrepancy as to facts. The body presented a number of bruises, and the surgeons substantially agreed that death had resulted from peritonitis, shock, hæmorrhage, and a rent in the urinary bladder. It was also admitted that the relative, who had accompanied the patient to the asylum, communicated, as desired, the fact that he had had his water drawn. Next morning the attendant had some considerable difficulty in getting the patient up and dressing him. After this the bruises were perceived; some blood but no water issued from the urethra, serious constitutional symptoms set in, and life was extinct within forty-eight hours. No evidence was adduced that while the patient was in the asylum any urine had been passed or the introduction of the catheter attempted. In reply to the solicitor for the Corporation, Mr Gamgee stated that he had received all possible assistance at the autopsy from the asylum surgeons, who, he did not doubt, had acted to the best of their judgment and knowledge. The inquest was adjourned to the following morning, when the foreman of the jury begged to be allowed to make a statement, of which the following is an abstract: "The jury and myself have conferred upon this painful case prior to your [the deputy coroner] coming into court, and we wish to ask you whether it be possible for you to allow this inquiry to be adjourned for a month, and for you to lay the whole facts before the Lunacy Commissioners and the Home Secretary, as we desire, if possible, in the interests of the governing body of the institution, not to return a verdict of a criminal nature." The coroner adjourned the inquiry to the 18th instant, and undertook to communicate with the authorities, as desired by the jury, who reserved their decision.

COMPARATIVE TOXICITY OF METALS.

AT the last meeting of the Académie des Sciences (Oct. 24th) M. Ch. Richet read a paper in which he gave the results of his observations on the comparative *toxicity* of different metals. If a fish, he remarked, be placed in a toxic solution, it dies with a rapidity which depends on the greater or less concentration of the poison. The author gives as the limit of toxicity the maximum quantity of the poison dissolved in a litre of water, which allows the fish to live for forty-eight hours. Thus, the limit of toxicity for lithium chloride lies between 3 grammes and 2·6 grammes, or 2·8 grammes. He has by this means determined the limit of toxicity of various metals, taking care to employ in all instances the same acid radical (chlorides). He gives a table with a *résumé* of his researches. The limit of toxicity has been calculated not for the weight of chlorine, but for the weight of the metal combined with the chlorine, and always in relation to a litre of water. This table shows that there is no precise relation between the atomic weight of a body and its toxicity. Copper is 600 times more toxic than strontium, notwithstanding that its atomic weight is less. Lithium, the atomic weight of which is but a twentieth of the weight of barium, is yet three times more poisonous. Even in the case of metals of the same chemical family, no relation exists between atomic weight and toxicity. Thus, cadmium (atomic weight 112) is just half as poisonous as zinc (65). Lithium, with an atomic weight of 17, is 70 times more poisonous than sodium. Hence it appears that there is no relation between the chemical function of a body and its toxic power. In fact, potassium and sodium, the properties of which are so similar, are very unequally poisonous, one gramme of potassium being nearly 250 times more poisonous than one gramme of sodium.

THE DANGER OF CATHETERISM.

AN unfortunate case of death soon after the operation of catheterism, performed by a house-surgeon at King's College Hospital, has again brought the conduct of the metropolitan hospitals under the criticism of a coroner's jury, the public, and the press. So far as we can gather, the facts are these. Thomas Perry, aged seventy-four, was taken ill on October 17th with chills, and was attended by Dr. Watkins, who on October 31st advised his being taken to King's College Hospital. He was seen on that evening in the surgery by Mr. Holthouse, who passed a catheter, and relieved the retention of urine from which he was then suffering. This operation was attended with hæmorrhage. The man was not admitted into the wards, as there was no vacant bed, and the case was not considered sufficiently urgent to necessitate the provision of an extra bed. The hæmorrhage continued for some hours after the man got home, and on the third day he died, no medical

attendant having seen him in the interval. It is not for us to apportion blame, but it appears strange that medical aid was not sought for the patient during the two days previous to his death. The question, however, of greater moment is in reference to the man not obtaining admission to the hospital. Why, if extra beds can be made up at King's College Hospital, must a case be so *very urgent* before this step is taken? Is the difficulty one of accommodation, or of nursing? Is it the committee or the nursing authorities of the hospital who object to its being done? The public have a right to know this. Of course, catheters are daily passed in surgeries, and the patients sent home afterwards without any ill effects; but there are sufficient recorded cases to show that this simple operation in the most skilled hands may be followed by death. To our view *no operation* should be undertaken at a metropolitan hospital unless the operator is prepared, should occasion arise, to admit the patient. And it certainly was an error in judgment to allow the man to leave the hospital while the hæmorrhage was continuing. To expect infallibility in house-surgeons or any other officials is absurd; and when such cases as this arise, the countless others in which timely aid is rendered with great efficiency and skill, and at a cost of a good deal of personal discomfort, are apt to be forgotten. What such cases should cause reasonable men to ask is, if they are in any way due to obstructive action on the part of those who frame the rules of these institutions.

OSSEOUS LESIONS IN HEMIPLEGIA.

A COMMUNICATION by M. Debove to the Société Médicale des Hôpitaux shows that the bone changes observed in locomotor ataxy are not confined to that disease, but are to be found also in some cases of old hemiplegia. He had been struck by several cases of fracture of limbs on the paralysed side, an accident which suggested the probability of some change in the composition of the bones. He therefore examined the bone in several cases, comparing the condition of the humerus on the paralysed side with that of the opposite limb. The former was always found to be less heavy, the central canal was larger, and the osseous substance was less compact, particularly in the neighbourhood of the medulla, where it was spongy. In thin sections, examined under the microscope, it was found that the Haversian canals were enlarged, especially towards the centre of the bone. On chemical analysis the amount of fat was found to be increased. The fractures in these bones seemed to unite very much as in healthy bones, perhaps even a little more promptly, but with a more abundant callus.

THE ETHICS OF DISPENSING.

AT a meeting of the Pharmaceutical Society on the 2nd inst. a discussion took place which has no little interest both for prescribers and dispensing druggists. The discussion was *à propos* of a paper by Mr. Martindale on an "incompatible mixture," the prescription for which had been given him to dispense. The following is the prescription:—"Hydrarg. perchlor., gr. ii.; potassii iodidi, ℥ii.; sp. chloroformi, tinct. cinchonæ, aa ℥i.; quiniæ sulph., ℥ss.; aquæ, ℥ii. M." The result of the above mixture is the precipitation of the quinine by the potassio-mercuric iodide, and the solution of the precipitate by the chloroform, which forms a viscid oily mass that rolls about the bottom of the bottle, and would be liable, of course, to be taken at a single dose, with very undesirable consequences. Mr. Martindale deserves our thanks for bringing the matter forward. The question arises, however, What *is* the duty of the pharmacist with regard to such a prescription? To dispense it as prescribed would be dangerous. Mr. Martindale found that if the water were replaced in part by glycerine, and if the quinine were first rubbed up with the glycerine, no precipitate was produced. He urged that the substitution of glycerine for water was in itself harmless, and that the dispenser might make the substitution provided he communicated the fact forthwith to the prescriber. The discussion turned upon the right of the dispenser to make additions or alterations to a prescription, and we need hardly say that our opinion is decidedly *that he has no such right.* In all cases where errors occur, except in instances of great urgency, the prescription should be returned to the writer for revision. During the discussion Professor Redwood made the following very pertinent remarks:—

"The case of the prescribing physician of the present day was very different from that of many leading physicians thirty, forty, or fifty years ago. Going back to the period when Dr. Pereira, Dr. Anthony Todd Thompson, Dr. Burrows, and a number of other eminent physicians were practising in London, it would be found that their prescriptions formed the types of good medical prescriptions, and were not such as were very likely to present any difficulty to the dispenser, because those men had all attained to their high medical position through the door of pharmacy. They had all, as used to be frequently the case, commenced as apothecaries, dispensing their own medicines, and became, therefore, practically acquainted with the compatibilities and incompatibilities of the substances they desired to administer. But in the present day medical men often desired to administer certain medicines, but had no practical knowledge of the best form in which to administer them. They were, therefore, limited to a small category of prescriptions, which they might know to be everything to be desired in appearance, character and so forth; but if they stepped out from that line and attempted to administer any new medicine, in any new form, they experienced a difficulty, and consequently the responsibility which was now thrown on the pharmacist was far greater than was the case formerly; and it did behove the pharmacist to consider in what way and to what extent he might exercise his responsibility in deviating from the instructions given."

AN ALARM OF PLAGUE IN THE THAMES.

THE public and the profession will learn with no little astonishment from the report of the Medical Officer of the Port of London (Dr. Collingridge) for the half-year ending June 30th, 1881, just published, that in April last there was an alarm of cases of plague having been introduced into the Thames. The facts, as stated in the Report, are as follows. On the 27th of April it was reported both to the Port Sanitary Authority and to the Local Government Board that a ship named the *Kate Fawcett* had passed into dock "having cases of plague on board." An immediate investigation of the circumstances under which the report had arisen was made by Mr. Netten Radcliffe under instructions from the Local Government Board; and, in conjunction with Dr. Collingridge, representing the Port Sanitary Authority, with the result of showing that there was not a "shadow of truth" in the report, the only foundation for it being, as Dr. Collingridge states, "that after the vessel had left Bussorah in February the plague had broken out there." The news of this outbreak had been telegraphed to Europe and Egypt, and had been received in Egypt a few hours before the *Kate Fawcett* had reached Suez. The vessel was therefore detained at Suez, and afterwards at Marseilles, and in all subjected to twenty-nine days' quarantine at these two ports before she was permitted to sail for the Thames. Dr. Collingridge observes: "Such a case shows very clearly the very great hardship and utter uselessness of an unscientific and illogical system of quarantine. During the whole of her voyage, including quarantine, from the 16th of February to the 27th of April, there had not been a single case of illness on

board." This statement occasioned us so much surprise that we deemed it worth while to make some further inquiry about it, and we learn that the outbreak of plague of which, in accordance with quarantine rules and practice, the *Kate Fawcett* was made a victim at Suez and Marseilles, was not at Bussorah, the port of departure of the ship, but in the depths of Mesopotamia, hundreds of miles distant from that port. The ship, moreover, carried an experienced surgeon on the voyage. How the report was started in the London Docks that the ship had come up the river and entered the dock with actual cases of plague on board does not appear to have been discovered, but the report would appear to have been of the nature of a so-called "practical joke." Happily the course taken by the manager of the docks nipped in the bud the scare that was imminent, and which would probably have extended to the whole of London. Immediately on hearing the report he gave information of it to the port sanitary authority and the Local Government Board, and thanks to the energy of both the central and the local authorities, and especially to the activity of Dr. Collingridge, the worthlessness and untruthfulness of the report were made clearly evident before it became generally current in the docks. In this way the report became so thoroughly quashed that it is only now, half a year after the occurrence, that we have become aware it ever existed. The Port of London Sanitary Committee never rendered better service to the community than in thus effectually putting a stop to an alarming report which would else have given rise to an undesirable scare.

A REMARKABLE WOUND OF THE BRAIN.

AN instance of singular tolerance of a severe wound of the brain was recently communicated by M. Dubrisay to the Société de Médecine de Paris. A man, aged forty-four, in an attempt at suicide, sent a small dagger through his skull into the brain. The weapon was ten centimetres long and one wide. He had held the dagger in his left hand, and given it with the right several blows with a mallet, believing that he would fall dead at the first blow. To his profound surprise he felt no pain, and observed no particular phenomenon. He struck the dagger, in all, about a dozen times. The man was a drunkard, but was sober at the moment of the attempt. When seen, about two hours later, the handle of the dagger was projecting from the skull at the junction of the posterior and middle third, a little to the right of the middle line, and in a transverse position. The whole blade was embedded except a part one centimetre in length. For half an hour unsuccessful attempts were made to get the dagger out. The patient was placed on the ground, two vigorous persons fixed his shoulders, and, aided by a strong pair of carpenter's pincers, repeated attempts were made, but without success. The patient and assistants were raised off the ground, but the dagger was immovable. These attempts caused no pain. More powerful mechanical instruments were then employed. The patient, who walked well, and complained of no headache, was taken to a coppersmith's, and by strong pincers the handle of the dagger was fastened to a chain, which was passed over a cylinder turned by steam power. The pincers, used for drawing out tubes of copper, were so made that the more they were pulled the tighter they grasped. The man was then fastened to rings fixed in the ground, and the cylinder was gently set in motion. At the second turn the dagger came out. The blade measured ten centimetres in length, of which nine had entered the interior of the skull. The patient, who had submitted with the greatest coolness to these manœuvres, suffered no pain or inconvenience. Some drops of blood escaped, and a few minutes afterwards the man was able to walk away to a hospital, where he remained in bed for ten days, but without fever or pain. He then returned to his work, and the wound gradually healed. M. Dubrisay endeavoured by a post-mortem experiment to ascertain what parts of the brain had been injured. He drove the dagger into the head of a cadaver in the same situation, and to the same depth, and found that, without injuring the superior longitudinal sinus, it had passed into the cerebral substance, just behind the ascending parietal convolution, and thus behind the motor zone; the point had not reached the base. The difficulty in extraction had been due solely to the fixation of the instrument by the edges of the wound in the bone.

MORTALITY OF THE POOR.

WE have not seen "Baron G. F. Kolb's lately compiled book of universal statistics," and therefore have no knowledge of the data upon which he founds the general conclusions reproduced by the *Hastings and St. Leonards Times*. We are, however, prepared to believe that comparing the vital history of one thousand well-to-do with that of an equal number of poverty-stricken persons results something like the following may have been obtained. At the end of five years only 655 of the poor were still living, while 943 of the prosperous survived. After fifty years there remained no more than 283 of the poor, but 557 of the rich. At the end of seventy years 235 of the well-to-do, and only 65 of the necessitous, lived. Taking the figures as a whole, the length of life is said to have been fifty years for the wealthy and thirty-two for the indigent. Possibly the statistical bases of these calculations may have been inaccurate, and the process of deduction may have been unsatisfactory, but the broad inferences are probably just. We have the less hesitation in accepting the general lesson taught by these figures, because it seems that the results have been discounted for the mortal effects of idleness. "Idleness, as compared to intense industry, prejudicially outweighs all the advantages of ease and abundance." This appears to imply that the selection of cases made at the outset was not vitiated by any preconceived hypothesis that the poor are oppressed by circumstances, while the rich are pampered. Undoubtedly the risks to life are greater in the rough and hard struggle for existence which falls to the lot of the poor than in the more placid career of the well-to-do. This is obvious. At the same time it is evident that the comparison instituted is between very fortunate and very unfortunate persons: the one enjoying the advantages of prosperity without its drawbacks, the other suffering not merely from the needs, but the vices, bred of adversity. The temperate and industrious poor compare favourably with the average of the well-to-do orders, while they are as much superior to the luxuriously living and idle or dissipated classes of the rich as the figures adduced in the above summary would seem to show them inferior in point of longevity as compared by Baron Kolb. Taking any large class of the population, its mortality will be in inverse ratio to the faithfulness with which it obeys the laws of nature, which makes life depend on healthful activity. Inaction is as great an enemy to existence as excessive labour. Indeed, other things being equal, idleness is more destructive than severe labour. Nutrition is proportionate to work; health is the wage of labour. It is desirable that this should be generally understood. Worry is disorderly, and destroys while it exhausts. The relatively higher mortality of the poor than the rich is the consequence of a threefold evil, which grows out of poverty—namely, anxious, fitful, and reluctant labour, combined with irregular modes of life. The poor are worried by their poverty; they work irregularly, and they live irregularly. These are in themselves fruitful causes of suffering and death, and when to this we add that in moments of good fortune there is a strong tendency on the part of the necessitous classes to indulge their generally repressed appetites, there is quite

enough in the case to account for the high mortality to which they are declared subject, while outside all this lies the large factor of risk to life by accident in the callings to which the so-called "labouring" classes are driven or incline. There is nothing remarkable in the rates of mortality reported, but it is well its conditions should be generally recognised, or false impressions may be produced.

THE ACTION OF POISONS ON THE MOLLUSCA.

THE tolerance exhibited by many of the lower organisms to poisons which have a profound effect on higher animals is well illustrated by some experiments made by Yung on the lamellibranch mollusca, and communicated to the Paris Académie des Sciences. Elevation of temperature up to 104° F. accelerates the cardiac contractions. Reflex movements and nervous irritability disappear before the heart is paralysed. Soft water has a very prejudicial action, quickly causing muscular relaxation and death. Curara, in small quantities, has no influence; a large dose weakens the movements of the animal, but does not arrest them; it has no special action on the heart. Strychnine has a transient stimulant effect; whatever dose is employed a few local contractions constitute the only effect; general tetanus is never produced. A small dose of nicotine has a similar action, but a large dose causes death with muscular relaxation; the cardiac pulsations are accelerated and the size of the heart is increased, probably in consequence of a contraction of the peripheral arteries. Atropine, even in large doses, has no appreciable effect. Digitaline only influences the heart when applied to it directly; in this case the number of pulsations is lowered, and the heart is sometimes arrested. The effect of veratrine is similar to that of nicotine. The action of muscarine is not uniform; in most cases it causes general muscular contraction and an acceleration, followed by a rapid retardation of the cardiac pulsations. Upas antiar has no general effect, but quickly paralyses the heart if applied to it directly. Sulphocyanide of potassium weakens the reflex actions while altering but little the nervous excitability. A small quantity seems to accelerate the action of the heart, but a large dose arrests it in diastole. If the poison is applied to the exposed heart a permanent arrest is produced. The experiments were made on Anodonta anatina, Solen ensis, and Mya arenaria.

GRAHAM BELL'S BULLET-FINDER.

MR. GRAHAM BELL has exhibited to the Académie des Sciences, at Paris, the instrument which was devised to discover the position of the bullet in the body of the late President Garfield, and which, although in that case unsuccessful, seems to promise to be occasionally of service. It is a modification of Hughes's induction balance, and consists essentially of two flat coils parallel and partially superposed, so that the extremity of one corresponds nearly to the axis of the other. One is made of large wire, and constitutes the primary coil; the other, of fine wire, is the secondary coil. Both coils are embedded in a mass of paraffin, and placed in the centre of a wooden planchette furnished with a handle. The vibratory current, derived from a voltaic pile, traverses the primary coil, while the circuit of the second compasses an ordinary telephone. In these conditions no sound can be perceived through the telephone. But if any metallic body is brought near the overlapping part of the coils a sound is heard, the intensity of which depends on the nature and shape of the metallic body, and on its distance from the coil. The most favourable shape is a flat disc parallel to the surface of the skin; the least favourable is a disc placed perpendicularly to the skin. Since there are practical difficulties in arranging the amount of superposition of the coils which is most advantageous, it is convenient to intercalate in the primary and secondary circuits respectively two additional coils analogous to the first, but much smaller in size, the common surface of which can be readily arranged, and in this way the telephone can be quickly reduced to perfect silence. If it is desired to determine the depth at which the metallic body lies, this can readily be done, provided its form is known. The apparatus, being applied to the skin, is regulated until no sound is heard; then removing the apparatus, it is brought near to a body similar to that searched for, and the distance from this at which no sound can be heard indicates the distance from the surface occupied by the other object. On Oct. 7th an experiment was made in the presence of Dr. Hamilton and others on the person of a Colonel Clayton, who was wounded in 1862. The ball had passed through the articulation of the left clavicle. It was supposed to be lodged under the scapula, but by the new apparatus the ball was readily found to be in front of and below the third rib.

TYPHOID FEVER IN LONDON.

SINCE our last notice on the above subject but few additional facts have come to hand. Dr. Bond, the resident medical officer at University College Hospital, reports that there are at present twelve cases in the hospital, and that there have been as many as seventeen at one time. He states that the cases have not on the whole been of a severe type, in none have there been hæmorrhages, and there has been but one death. Delirium has not been more marked than [illegible] but in the fatal case there was furious delirium for [illegible] before death, and never any rash. One case [illegible] with extensive pneumonia, and recovered. [illegible] minster Hospital we learn that at the begin[illegible] there were eight cases under treatment, t[illegible] males and nine females) having been ad[illegible] ginning of September. There had been [illegible] tonitis and intestinal hæmorrhage. Th[illegible] most part, of mild type. In taking [illegible] thanking those gentlemen who have fu[illegible] information upon this subject, we think [illegible] advantage if complete data could be sup[illegible] occurring in the three months August to [illegible] shall be happy to receive and analyse such ret[illegible] hospital registrars may be enabled to make.

LEPROSY.

M. CORNIL, continuing the researches into the intimate pathology of leprosy to which we lately directed our readers' attention, made a further communication to the Académie de Médecine at the meeting on Oct. 25th. The occurrence in the leprous tubercles of the skin and mucous membranes of large cells filled with bacteria may be now considered as established; but our knowledge is still imperfect regarding the seat of the bacteria in other organs, and the various forms which they present. Those of the cutaneous tubercles are extremely small, being scarcely visible under a magnifying power of 300 or 400 diameters. But in other parenchymatous organs, such as the liver and testicle, the bacteria attain much more considerable dimensions. This is apparently due to the circumstance that their development is not hindered by compression. Those which are found free in the tubules of the testicle, for instance, are three or four times as large as those of the cutaneous tubercles, being 12- or 15-thousandths of a millimetre in length. In the fibrous tissues, in the cornea for example, in the neurilemma, in the sclerosed tissue of a lymphatic gland, and in the cellulo-adipose tissue, they are found interposed between the fibres and lamellæ, arranged end to end in long filaments, the individual bacteria being separated by transparent interspaces. Such compound filaments may be followed

through an extent of 100- to 150-thousandths of a millimetre, in a rectilinear or sinuous course. They thus present the same arrangement as the compound filaments of the bacteria of anthrax. In the protoplasm of cells in the detritus accumulated in the tubules of the testicle, and in the blood-vessels, sporules are found, free or agglomerated in masses, and in places entirely filling the capillary vessels.

VEGETARIANISM.

THE promoters of abstinence from the use of flesh as food and an exclusive diet of vegetables are again claiming attention for their system. We have nothing new to urge against the arguments of this school of social reformers. It is still the fact that whereas men may—in the sense of *can*—live on vegetables, it is not physiologically expedient that they should do so. The wear and tear of civilised life, with a great and continuous strain on the nervous system, require a nitrogenised diet. We have more than once urged the wisdom of using fish more extensively and commonly than it is now used. The flesh derived from the carcase of warm-blooded animals is not, perhaps, the best or safest form of staple food; and it must always—even under equitable commercial regulations, which are not, unfortunately, at present in force—be the dearest. At the same time we cannot recommend a recourse to vegetables. They are relatively more "heating" and less strength-giving than animal food. It is noticeable that those of the known animals which feed exclusively on vegetable food, whilst exhibiting great muscular strength, do not as a rule play any very prominent part in the kingdom to which they belong. They do not assert supremacy over other orders of the animal creation. The all-subduing, self-assertive, and conquering forms of life are sustained by a mixed diet, if not one exclusively animal. There are two aspects of this fact worthy of consideration. The flesh-eating animals are necessarily predatory, and they exercise their brains and nervous systems generally in a manner and degree both far in advance of the habits of life of the vegetable-feeding creatures around. These latter are comparatively subordinate, and on the whole inferior in point of mental force and character. This should suggest to the vegetarian that, inasmuch as man is the head of creation and intended to subdue and reign over all the forms of animal life and organism below the level of his own, he must needs be intended—in the sense of his being fitted by development—to feed on a diet consisting, at least in part, of flesh.

BUCCAL TUBERCULOSIS.

THE similarity of many of the pathological processes which affect the fauces and the larynx renders the occurrence of tubercular affection of the former a matter for little surprise, although of considerable interest. Five cases of primary tuberculosis of the soft palate have been published by Küssner. In all miliary tubercles were present, isolated yellowish-white nodules in the mucous membrane, surrounded by injection. Much more remarkable, however, were the lesions, apparently of the same nature, which were present in the mucous membrane of the mouth in a case which has been described by Eichhoff. The patient was a man, aged thirty-nine, who had never suffered from syphilis. The lower lip had become thickened and pendulous, so that the mouth could not be closed, and the mucous membrane over it presented numerous rugæ, and at its junction with the gums was an irregular ulcer, with thickened edges, half an inch in length. The upper lip was similarly affected, with ulcers between the lip and the gum. The mucous membrane of the tongue was thickened and uneven, yellowish nodosities being scattered over it, and an ulcer occupied the tip, while others were scattered over the hard palate, the soft palate being intact. The right tonsil was covered with yellowish prominences similar to those upon the tongue. The patient was suffering at the time from phthisis, and died soon afterwards. The diagnosis that the lesions in the mouth were tubercular in nature was confirmed by a microscopic examination.

FUMES FROM STOVES.

A CURIOUS scene is reported to have occurred in a church at Carmarthen recently when lighting the fires to warm the building for the first time this year. The congregation was so affected that the service had to be brought to a premature conclusion. This is not an unprecedented contingency in the use of stoves. The draught is generally considerable, and no deleterious effects are noticed, because the fumes of carbonic oxide are, as a rule, blown through the flues with the smoke, but they occasionally escape into the room, and then constitute a perpetual source of danger. In truth, the open fireplace, although it may be dirtier than the close stove, is incomparably preferable for heating purposes. The blast up the stove-pipe is a costly waste of heat while it lasts, and when it ceases the pipes are left coated with carbon ready to be driven back with any reverse current which may chance to be set up. With a few exceptions, perhaps, stoves are clumsy and wasteful apparatus for warming edifices or apartments of any size, and are only admissible where the fuel is wood. Hot-water pipes, steam-pipes—if they can be made safe,—and hot-air apparatus are the best appliances for heating purposes, or when these are not needed or are inconvenient there is nothing like open fireplaces of the best modern construction set down close on the hearth-stone, and burning slowly downwards from the top. They are the most economical, and throw out the largest amount of heat into the apartment, instead of up the chimney.

BOARDING-OUT OF LUNATICS.

WE agree with Dr. Patterson Wood, the medical superintendent of the Isle of Man Lunatic Asylum, in the opinion that "No one should be allowed to keep a lunatic for profit without being registered and under official supervision." There is, however, nothing new in the suggestion. This is what the law expressly enjoins. It would be well if it could be more constantly applied. At the same time we do not agree with Dr. Wood in condemning the recourse to the boarding-out system. Doubtless, that method of providing for the insane requires active supervision, but there is no reason why this should not be given. It is only a question of adequate provision and a faithful discharge of public duty by properly paid officials. The tendency to mass the insane in asylums is one of the most shortsighted and impolitic tendencies of the day. The only qualification we can make in opposing Dr. Wood's argument against the boarding-out system is a recognition that, as a rule, the incurable and imbeciles are placed in private families, whereas these would probably be better off in asylums. Recent cases, if only they are properly treated, have, we are convinced, a better chance of recovery in ordinary households than in asylums for the insane.

THE USE AND ABUSE OF TOBACCO.

THE Société contre l'Abus du Tabac has done good work in exposing the evils which result from the abuse of tobacco. We have no sympathy with the attempt to restrict the moderate use of this luxury; but it is well that some effort should be made to oppose excessive indulgence in the use of tobacco, and particularly of the stronger sorts. It may be true—we believe it is the fact—that the indiscriminate use of what is called "mild" or "medium" tobacco does greater mischief in the aggregate than can be laid to the charge of the more potent varieties, for the obvious reason that only

enough in the case to account for the high mortality to which they are declared subject, while outside all this lies the large factor of risk to life by accident in the callings to which the so-called "labouring" classes are driven or incline. There is nothing remarkable in the rates of mortality reported, but it is well its conditions should be generally recognised, or false impressions may be produced.

THE ACTION OF POISONS ON THE MOLLUSCA.

THE tolerance exhibited by many of the lower organisms to poisons which have a profound effect on higher animals is well illustrated by some experiments made by Yung on the lamellibranch mollusca, and communicated to the Paris Académie des Sciences. Elevation of temperature up to 104° F. accelerates the cardiac contractions. Reflex movements and nervous irritability disappear before the heart is paralysed. Soft water has a very prejudicial action, quickly causing muscular relaxation and death. Curara, in small quantities, has no influence; a large dose weakens the movements of the animal, but does not arrest them; it has no special action on the heart. Strychnine has a transient stimulant effect; whatever dose is employed a few local contractions constitute the only effect; general tetanus is never produced. A small dose of nicotine has a similar action, but a large dose causes death with muscular relaxation; the cardiac pulsations are accelerated and the size of the heart is increased, probably in consequence of a contraction of the peripheral arteries. Atropine, even in large doses, has no appreciable effect. Digitaline only influences the heart when applied to it directly; in this case the number of pulsations is lowered, and the heart is sometimes arrested. The effect of veratrine is similar to that of nicotine. The action of muscarine is not uniform; in most cases it causes general muscular contraction and an acceleration, followed by a rapid retardation of the cardiac pulsations. Upas antiar has no general effect, but quickly paralyses the heart if applied to it directly. Sulphocyanide of potassium weakens the reflex actions while altering but little the nervous excitability. A small quantity seems to accelerate the action of the heart, but a large dose arrests it in diastole. If the poison is applied to the exposed heart a permanent arrest is produced. The experiments were made on Anodonta anatina, Solen ensis, and Mya arenaria.

GRAHAM BELL'S BULLET-FINDER.

MR. GRAHAM BELL has exhibited to the Académie des Sciences, at Paris, the instrument which was devised to discover the position of the bullet in the body of the late President Garfield, and which, although in that case unsuccessful, seems to promise to be occasionally of service. It is a modification of Hughes's induction balance, and consists essentially of two flat coils parallel and partially superposed, so that the extremity of one corresponds nearly to the axis of the other. One is made of large wire, and constitutes the primary coil; the other, of fine wire, is the secondary coil. Both coils are embedded in a mass of paraffin, and placed in the centre of a wooden planchette furnished with a handle. The vibratory current, derived from a voltaic pile, traverses the primary coil, while the circuit of the second compasses an ordinary telephone. In these conditions no sound can be perceived through the telephone. But if any metallic body is brought near the overlapping part of the coils a sound is heard, the intensity of which depends on the nature and shape of the metallic body, and on its distance from the coil. The most favourable shape is a flat disc parallel to the surface of the skin; the least favourable is a disc placed perpendicularly to the skin. Since there are practical difficulties in arranging the amount of superposition of the coils which is most advantageous, it is convenient to intercalate in the primary and secondary circuits respectively two additional coils analogous to the first, but much smaller in size, the common surface of which can be readily arranged, and in this way the telephone can be quickly reduced to perfect silence. If it is desired to determine the depth at which the metallic body lies, this can readily be done, provided its form is known. The apparatus, being applied to the skin, is regulated until no sound is heard; then removing the apparatus, it is brought near to a body similar to that searched for, and the distance from this at which no sound can be heard indicates the distance from the surface occupied by the other object. On Oct. 7th an experiment was made in the presence of Dr. Hamilton and others on the person of a Colonel Clayton, who was wounded in 1862. The ball had passed through the articulation of the left clavicle. It was supposed to be lodged under the scapula, but by the new apparatus the ball was readily found to be in front of and below the third rib.

TYPHOID FEVER IN LONDON.

SINCE our last notice on the above subject but few additional facts have come to hand. Dr. Bond, the resident medical officer at University College Hospital, reports that there are at present twelve cases in the hospital, and that there have been as many as seventeen at one time. He states that the cases have not on the whole been of a severe type, in none have there been hæmorrhages, and there has been but one death. Delirium has not been more marked than usual, but in the fatal case there was furious delirium for some time before death, and never any rash. One case was admitted with extensive pneumonia, and recovered. From the Westminster Hospital we learn that at the beginning of the month there were eight cases under treatment, twenty-two (thirteen males and nine females) having been admitted since the beginning of September. There had been one death from peritonitis and intestinal hæmorrhage. The cases were, for the most part, of mild type. In taking the opportunity of thanking those gentlemen who have furnished us with the information upon this subject, we think it would be of great advantage if complete data could be supplied of the cases occurring in the three months August to October; and we shall be happy to receive and analyse such returns which the hospital registrars may be enabled to make.

LEPROSY.

M. CORNIL, continuing the researches into the intimate pathology of leprosy to which we lately directed our readers' attention, made a further communication to the Académie de Médecine at the meeting on Oct. 25th. The occurrence in the leprous tubercles of the skin and mucous membranes of large cells filled with bacteria may be now considered as established; but our knowledge is still imperfect regarding the seat of the bacteria in other organs, and the various forms which they present. Those of the cutaneous tubercles are extremely small, being scarcely visible under a magnifying power of 300 or 400 diameters. But in other parenchymatous organs, such as the liver and testicle, the bacteria attain much more considerable dimensions. This is apparently due to the circumstance that their development is not hindered by compression. Those which are found free in the tubules of the testicle, for instance, are three or four times as large as those of the cutaneous tubercles, being 12- or 15-thousandths of a millimetre in length. In the fibrous tissues, in the cornea for example, in the neurilemma, in the sclerosed tissue of a lymphatic gland, and in the cellulo-adipose tissue, they are found interposed between the fibres and lamellæ, arranged end to end in long filaments, the individual bacteria being separated by transparent interspaces. Such compound filaments may be followed

through an extent of 100- to 150-thousandths of a millimetre, in a rectilinear or sinuous course. They thus present the same arrangement as the compound filaments of the bacteria of anthrax. In the protoplasm of cells in the detritus accumulated in the tubules of the testicle, and in the blood-vessels, sporules are found, free or agglomerated in masses, and in places entirely filling the capillary vessels.

VEGETARIANISM.

THE promoters of abstinence from the use of flesh as food and an exclusive diet of vegetables are again claiming attention for their system. We have nothing new to urge against the arguments of this school of social reformers. It is still the fact that whereas men may—in the sense of *can*—live on vegetables, it is not physiologically expedient that they should do so. The wear and tear of civilised life, with a great and continuous strain on the nervous system, require a nitrogenised diet. We have more than once urged the wisdom of using fish more extensively and commonly than it is now used. The flesh derived from the carcass of warm-blooded animals is not, perhaps, the best or safest form of staple food; and it must always—even under equitable commercial regulations, which are not, unfortunately, at present in force—be the dearest. At the same time we cannot recommend a recourse to vegetables. They are relatively more "heating" and less strength-giving than animal food. It is noticeable that those of the known animals which feed exclusively on vegetable food, whilst exhibiting great muscular strength, do not as a rule play any very prominent part in the kingdom to which they belong. They do not assert supremacy over other orders of the animal creation. The all-subduing, self-assertive, and conquering forms of life are sustained by a mixed diet, if not one exclusively animal. There are two aspects of this fact worthy of consideration. The flesh-eating animals are necessarily predatory, and they exercise their brains and nervous systems generally in a manner and degree both far in advance of the habits of life of the vegetable-feeding creatures around. These latter are comparatively subordinate, and on the whole inferior in point of mental force and character. This should suggest to the vegetarian that, inasmuch as man is the head of creation and intended to subdue and reign over all the forms of animal life and organism below the level of his own, he must needs be intended—in the sense of his being fitted by development—to feed on a diet consisting, at least in part, of flesh.

BUCCAL TUBERCULOSIS.

THE similarity of many of the pathological processes which affect the fauces and the larynx renders the occurrence of tubercular affection of the former a matter for little surprise, although of considerable interest. Five cases of primary tuberculosis of the soft palate have been published by Küssner. In all miliary tubercles were present, isolated yellowish-white nodules in the mucous membrane, surrounded by injection. Much more remarkable, however, were the lesions, apparently of the same nature, which were present in the mucous membrane of the mouth in a case which has been described by Eichhoff. The patient was a man, aged thirty-nine, who had never suffered from syphilis. The lower lip had become thickened and pendulous, so that the mouth could not be closed, and the mucous membrane over it presented numerous rugæ, and at its junction with the gums was an irregular ulcer, with thickened edges, half an inch in length. The upper lip was similarly affected, with ulcers between the lip and the gum. The mucous membrane of the tongue was thickened and uneven, yellowish nodosities being scattered over it, and an ulcer occupied the tip, while others were scattered over the hard palate, the soft palate being intact. The right tonsil was covered with yellowish prominences similar to those upon the tongue. The patient was suffering at the time from phthisis, and died soon afterwards. The diagnosis that the lesions in the mouth were tubercular in nature was confirmed by a microscopic examination.

FUMES FROM STOVES.

A CURIOUS scene is reported to have occurred in a church at Carmarthen recently when lighting the fires to warm the building for the first time this year. The congregation was so affected that the service had to be brought to a premature conclusion. This is not an unprecedented contingency in the use of stoves. The draught is generally considerable, and no deleterious effects are noticed, because the fumes of carbonic oxide are, as a rule, blown through the flues with the smoke, but they occasionally escape into the room, and then constitute a perpetual source of danger. In truth, the open fireplace, although it may be dirtier than the close stove, is incomparably preferable for heating purposes. The blast up the stove-pipe is a costly waste of heat while it lasts, and when it ceases the pipes are left coated with carbon ready to be driven back with any reverse current which may chance to be set up. With a few exceptions, perhaps, stoves are clumsy and wasteful apparatus for warming edifices or apartments of any size, and are only admissible where the fuel is wood. Hot-water pipes, steam-pipes—if they can be made safe,—and hot-air apparatus are the best appliances for heating purposes, or when these are not needed or are inconvenient there is nothing like open fireplaces of the best modern construction set down close on the hearth-stone, and burning slowly downwards from the top. They are the most economical, and throw out the largest amount of heat into the apartment, instead of up the chimney.

BOARDING-OUT OF LUNATICS.

WE agree with Dr. Patterson Wood, the medical superintendent of the Isle of Man Lunatic Asylum, in the opinion that "No one should be allowed to keep a lunatic for profit without being registered and under official supervision." There is, however, nothing new in the suggestion. This is what the law expressly enjoins. It would be well if it could be more constantly applied. At the same time we do not agree with Dr. Wood in condemning the recourse to the boarding-out system. Doubtless, that method of providing for the insane requires active supervision, but there is no reason why this should not be given. It is only a question of adequate provision and a faithful discharge of public duty by properly paid officials. The tendency to mass the insane in asylums is one of the most shortsighted and impolitic tendencies of the day. The only qualification we can make in opposing Dr. Wood's argument against the boarding-out system is a recognition that, as a rule, the incurable and imbeciles are placed in private families, whereas these would probably be better off in asylums. Recent cases, if only they are properly treated, have, we are convinced, a better chance of recovery in ordinary households than in asylums for the insane.

THE USE AND ABUSE OF TOBACCO.

THE Société contre l'Abus du Tabac has done good work in exposing the evils which result from the abuse of tobacco. We have no sympathy with the attempt to restrict the moderate use of this luxury; but it is well that some effort should be made to oppose excessive indulgence in the use of tobacco, and particularly of the stronger sorts. It may be true—we believe it is the fact—that the indiscriminate use of what is called "mild" or "medium" tobacco does greater mischief in the aggregate than can be laid to the charge of the more potent varieties, for the obvious reason that only

habitual and seasoned smokers can use strong tobacco without gastric disturbance, which converts the pleasure into a pain. It would be well if the sickness which is generally caused by smoking a very strong pipe were a common penalty of smoking; then only those who are really soothed and benefited by tobacco would use it. As it is, nearly everybody can smoke mild tobacco with impunity; and since it is only beneficial to a small proportion of the many, the majority must be injured by its use. The Société contre l'Abus du Tabac is about to issue prizes for essays on the deleterious effects of the "weed." The following are the subjects:—

"No. 2. *Prix Médical.*—Quelle est l'influence du tabac sur la marche de la grossesse et sur la lactation, chez les femmes qui font usage du tabac, qui en respirent la fumée, ou qui travaillent à sa manipulation? Présenter des observations recueillies sur les personnes, et, s'il est possible, des expériences chez les animaux.

"No. 3. *Prix fondé par* M. le Dr. A. Bertherand.—Déterminer, par des considérations psychologiques, avec faits bien observés à l'appui, l'influence que l'habitude excessive du tabac détermine sur le *moral*, le *caractère*, et les *rapports sociaux* des fumeurs."

We shall be interested to see what the successful competitor makes of the second topic. There can be no room to question the presumption that an excessive use of tobacco *does* occasionally deteriorate the moral character, as the inordinate use of chloral or bromide of potassium may deprave the mind, by lowering the tone of certain of the nervous centres, in narcotising them and impairing their nutrition. Whether the nicotine of the tobacco can act on nerve cells as alcohol acts may be doubtful, but the victim of excess in the use of tobacco certainly often very closely resembles the habitual drinker of small drams—the tippler who seldom becomes actually drunk,—and he readily falls into the same maudlin state as that which seems characteristic of the subject of slow intoxication by chloral or of the victim of bromide.

THE EDINBURGH GRADUATES' CLUB.

THE quarterly dinner of this club, held on Wednesday last at St. James's Hall, in the unavoidable absence of Dr. Myrtle of Harrogate, was presided over by Dr. Cobbold, one of the vice-presidents. Amongst several other visitors were the Rev. Mr. Hill, chaplain of the Metropolitan Asylums Board, Sir William Mac Cormac, Mr. Mullen, &c. The attendance was large, and the proceedings were, as usual, of a pleasant and hospitable character.

THE MEDICAL EVIDENCE IN REGINA v. DUFF.

THE Irish courts have recently witnessed a discrepancy in medical evidence which caused very pointed comment from the judge, and is certainly remarkable, if not even painful. In the case of the murder of the policeman Daly by an Irishman named Duff, evidence was given that the prisoner was seen to strike the bare head of the deceased with a large heavy knife, inflicting a wound from which he died. Dr. Chance described the injury as an incised wound running obliquely across the brow for about two inches, with subjacent fracture of the skull and laceration of the brain. Dr. Kelly, who also saw the case during life and made the post-mortem examination, deposed that "the wound was caused by a blow of a stone or of a brick," and that "it was impossible it could have been inflicted with one of those heavy cutting instruments," a butcher's knife, although the wound was "very clean cut." When asked, "Was there any bruising?" he replied, "The cut was rather a clean one, but there was an irregularity in it." He also stated that he found a portion of gravel or grit in the skull, which, he assumed, "could not have been carried into it by a knife." It is difficult to understand how a surgeon could have denied the *possibility* of a heavy knife making a clean-cut wound in the scalp with a fracture of the bone beneath. And the suggestion that the scalp wound was made by a knife and that the fracture was caused by a stone striking the man exactly along the line of this wound is not easy to accept.

CONTAGIOUS ECTHYMA IN SMALL-POX.

A CURIOUS tendency to ecthyma has been observed by Du Castel among the small-pox patients at the St. Antoine Hospital at Paris. The spots were most abundant on the chest, and next on the upper and lower limbs. The course of the eruption could not always be followed with exactness on account of the concomitant pustules of variola, but in some cases spots of pemphigus were mingled with those of ecthyma. Some of the latter were two or three centimetres in diameter, and were sometimes confluent. They usually appeared in several successive crops, either during the period of suppuration of the variolous eruption, or during the stage of desquamation, and were attended in many cases by increased fever and delirium, occasionally ending in the death of the patients. In cases in which the ecthyma was confluent the elevation of temperature was very great, reaching even 105° F., but when the eruption appeared during convalescence the fever was slighter and more transient. At first it was regarded as a mere accident, but its severity and frequency caused more attention to be devoted to it. Since June, not a single case has been admitted which did not present this eruption. It can scarcely be ascribed to cachexia, for many of the patients were strong and vigorous. It appears to be in itself contagious, for several of the attendants suffered from it who were not attacked with small-pox. The first to be attacked was a nurse in the female ward, who often went about with her feet naked, and became affected with ecthyma on the legs. The second was an interne who had a spot a centimetre and a half in diameter upon his forefinger, which he ascribed to contact with a patient who presented the eruption. In the liquid of the bullæ spores were found in considerable quantity, which were arranged in more or less regular chaplets. Inoculation on a healthy part of the skin of the same patient caused a spot of ecthyma. Inoculation on a healthy individual was not attempted. The treatment tried consisted in lotions of carbolic acid, and appeared to do some good, although it was not entirely successful.

THE MEDICAL SOCIETY OF LONDON.

THE subject of the Treatment of Rheumatic Fever by Salicin and the Salicylates will be discussed at this Society on December 5th. The debate will be opened by Dr. Hilton Fagge, who will furnish the experience of Guy's Hospital upon this matter.

ENDEMIC HÆMATURIA.

AT the last meeting of the Linnæan Society, Sir John Lubbock in the chair, Dr. Cobbold exhibited several hundred ova of Bilharzia hæmatobia. They were taken from the urine of a gentleman who had come from Egypt only the day previously, but who had resided there for several years. He appears to have contracted the disease during a shooting expedition, having been tempted to drink canal water without employing a filter. During the meeting the eggs were hatched in water, and the Fellows present had an opportunity of watching the active movements of the free ciliated larvæ. These cone-shaped infusorial animalcules swam about with astonishing rapidity.

SURGEON G. WATERS, Bombay Army, has been appointed Professor of Pathology in the Grant Medical College, Bombay.

THE banquet in honour of Professor Virchow is to be held at Berlin on the 19th inst., in the Rathhaus, and promises to be highly brilliant and successful. The sum of 30,000 marks, originally proposed to be raised for the memorial, appears likely to be greatly exceeded. This memorial will consist of a marble bust of the Professor, and will be placed in the hall of the Pathological Institute on the above-mentioned day, in commemoration of his twenty-five years' labours as a teacher of medical science.

IN the new weekly magazine, *Knowledge*, conducted by Mr. Richard A. Proctor, B.A., the first number of which has just appeared, there are some very good scientific articles written in an easy and popular style. Amongst them is one by Professor W. B. Carpenter, on the Relation of Food to Muscular Work, in which the fallacies propounded by Liebig in connexion with his doctrine of the direct dependence of muscular energy on the expenditure of nitrogenous food are exposed.

OUR attention has been called to a case heard at the Sunderland police-court on Tuesday last, in which a German surgeon was charged, in conjunction with a hawker, with conspiring to defraud the North-Eastern Railway Company. The case has excited considerable interest, but is still *sub judice*, and therefore not at present in a stage properly to be made the subject of comment.

SIR JAMES PAGET, Bart., F.R.S., and Alex. Bain, LL.D., late Professor of Logic at Aberdeen University, were formally nominated on the 5th inst. for the Rectorship of the University, in succession to Lord Rosebery, whose term of office has expired. The polling takes place on this day, Saturday, the 12th inst.

THE death is announced in India of Surgeon-Major J. W. R. Amesbury, Bengal Medical Service; also of Surgeon-Major Frederick Pooley Edis, F.R.C.S., of H.M.'s Indian Army, at Santa Barbara, California, in his thirty-ninth year; and of Surgeon A. F. Adams, Bombay Service, at Kurrachee, on Oct. 11th.

MR. BARRAUD, we learn, intends publishing his picture of the principal members of the International Medical Congress this year. It will contain about 500 portraits of the leading medical men in this and other countries represented at the Congress.

MR. H. P. SYMONDS, F.R.C.S. Ed., M.R.C.S., son of the late coroner, is, we understand, a candidate for the coronership of Oxford University, as well as Mr. Darbishire, whose candidature we mentioned last week.

THE honour of knighthood has, we understand, been conferred upon Professor Erasmus Wilson, President of the Royal College of Surgeons of England.

THE governors of St. Thomas's Hospital have, it is stated, resolved to ask the Duke of Edinburgh to allow himself to be put in nomination for the presidency of the institution.

THE AGRICULTURE OF THE WORLD.—An excellent agricultural chart by Mr. H. Kains-Jackson, showing the comparative food production of the chief countries of the world, will be published with *The Graphic* for Nov. 19th. By means of coloured diagrams, the yields of the various cereals, the wheat and flour imports into the United Kingdom for the past five years, the hop and grape average harvest, and the amount of live stock, including horses, cattle, pigs, and sheep for the current year, are compared. The chart is calculated to be of great utility at the present time.

Public Health and Poor Law.

LOCAL GOVERNMENT DEPARTMENT.

REPORTS OF MEDICAL OFFICERS OF HEALTH.

Limehouse (*Metropolis*).—Mr. G. A. Rogers reports for 1880 a birth-rate of 38 per 1000 population, being nearly 3 per 1000 above the average of the previous ten years, and a death-rate of 26·2 per 1000, an excess of 3 per 1000 above the average of the past ten years, the death-rate for the whole of the metropolis in 1880 being 22·2 per 1000 inhabitants. The mortality from small-pox in the district during the year fell considerably below the decennial average; but the mortality from scarlet fever showed a remarkable increase, and reached a higher number than had been recorded in any year of the last decennium. The mortality from diphtheria, although exhibiting a decline as compared with the two previous years, still reached a total which "was almost double the average of the last ten years." Great activity was displayed by the sanitary authority in the work of disinfection, and the two disinfection stations which have been erected by the Board of Works have been largely used. Two waggons were employed for the conveyance of infected articles to the disinfectors, one for articles connected with cases of small-pox, the other for articles connected with cases of fever. Infected rooms were disinfected with chlorine with as little delay as possible after the termination of the disease. "By such precautions," says Mr. Rogers, "carried out with care, I am persuaded much infectious disease has been prevented, but still more remains to be done. Among sanitary reforms which I hope to see introduced is the compulsory notification to the medical officer of health of all cases of infectious disease. Frequently the first information I receive of the existence of infectious diseases in a locality is an intimation of a death from such disease therein. Of course, by that time all the mischief has been done, and the most that can be effected by your sanitary staff, after due disinfection, is to direct their attention to the locality, ready to combat any manifestations of disease which may appear." Mr. Rogers confesses that the clause introduced into the Poor Law Amendment Act, 1878, and for which the Limehouse Board was largely responsible, a clause which authorised the metropolitan sanitary authorities to contract with the Metropolitan Asylums Board for the reception and maintenance of non-pauper cases of infectious diseases into their hospitals, has proved a dead letter, and that some other course must be taken if the difficulty is to be overcome which the clause was intended to solve. He makes reference also to the steps taken by the Corporation of London in an endeavour to deal satisfactorily with town refuse, and hopes that the City will lead the way in the metropolis to a much-needed reform in this matter.

Poplar (*Metropolis*).—Mr. F. M. Corner, reporting on the *south* division of this district, reports for 1880 a death-rate of 23·1 per 1000 inhabitants, as compared with 22·2, the death-rate for the metropolis generally; a death-rate from zymotic diseases of 5·2 per 1000 inhabitants, as compared with 3·78 in the whole of the metropolis, and a death-rate of infants under one year of age of 171 per 1000 births, as compared with 158 for the whole of London. Scarlet fever appears to have been the most prevalent of the principal zymotic diseases during the year, but its prevalence was chiefly confined to the Millwall side of the Isle of Dogs, and to the district north and west of the East India Dock-road, and not to Cubitt-town, as happened in 1879. Instances are given of typhoid fever occurring in houses in which the cistern of the water-closet was also used for the supply of water for drinking and domestic purposes, the water being exposed to chances of pollution from sewer air. "The great increase of diphtheria in London, including Poplar," Mr. Corner adds, "is a further reason for directing the attention of householders to the importance of seeing to the water arrangements, and preventing, if possible, exposure of water to the chance of being poisoned by sewer gases." In one month, Mr. Corner relates, cases were reported to him of no less than ninety-eight houses having had their water cut off, apparently without notice, by the water company, for periods of from six to twenty-one days, in consequence of the neglect of the landlord or agent to pay the water-rates. The serious evils inflicted upon families by this course of procedure was

a subject of correspondence between the Board of Works and the Water Company, and the Company has assented to give notice to the Board when it proposes in future to deprive families of the water-supply. Mr. Corner hopes great things from the action taken by the Corporation of the City in respect to dealing with town refuse by the application of fire; and he says that by this process 8100 loads of refuse collected in the south division of the Poplar district could be reduced probably 80 per cent., and the residue would form a profitable article for the manufacture of an improved quality of bricks and cement, apparently much needed in the building trade.——Mr. R. M. Talbot, reporting on the *north* division of the Poplar district for 1880, returns a general death-rate of 19·6 per 1000 inhabitants, and a zymotic death-rate of 5·09 per 1000. The general death-rate of the division in 1860 was no less than 26·3 per 1000 of the population. "The most gratifying feature in the report," Mr. Talbot writes, "is the sanitary work of the year, as shown by the few deaths from typhoid fever—viz., 12." Twenty years ago the deaths ascribed to "fever" in the division, with a population little more than one-third the present, were nearly equal to the annual average (27) of the six years prior to 1879, "and as eight to one for the year just passed;" and he adds, differing markedly in this respect from the expression of opinion expressed by Professor Huxley at the recent meeting of the Sanitary Protection Association:—"If one wished to find a powerful illustration of the advantages accruing to a district from the Main Drainage System over the old cesspool system, one would want no stronger evidence than this fact. In the reports for the year we are comparing with the present, it is not unusual to find that notices were served upon occupiers of houses, calling upon them to empty foul and overflowing cesspools. The disgusting odour which accompanied this horrible operation must live in the memories of us all. To be relieved only from that is something to be thankful for. But though outbreaks of fever are known to have been caused in this manner, the baneful effects of the emptying were few in comparison to the general effect from the existence of such cesspools. The causes of typhoid fever are so well known that it is almost unnecessary to say that they are the introduction into the system either of vegetable or animal matter undergoing the process of decay, or of the gases generated during such process. Can we, then, wonder that the pollution of air and water, which was constantly occurring, was so prolific of typhoid fever?" Mr. Talbot notes the long-continued absence of typhus from his district, and the willingness with which the population receive the assistance of the sanitary staff now, especially in regard to disinfection; whereas, not long ago, the greatest resistance was offered to the proceedings of the sanitary authority. He refers also to the recognition now given by the population as a consequence of the continuous work of the sanitary authority in promoting habits of cleanliness.

THE READING SEWAGE FARM.

The Sewage Farm Committee of the Reading Corporation have issued a statement of their year's operations, from which the following facts are taken:—Total loss on the year, £146. Loss on crops grown, £1500. Receipts from cattle, butter, and milk, £2743 13*s.* 11*d.* Cattle sold, £434 5*s.* 2*d.* Increase of valuation, after deducting expenses of purchase, &c., £535 5*s.* 1*d.* Sheep paid for keep, £102 13*s.* 2*d.* Total, £3815 17*s.* 4*d.* It is stated that, "looked at from a sanitary point of view, the farming operations had been a great success; and that Reading had never before been in such an excellent sanitary condition."

The Guardians of the Mile-end Old Town have adopted and communicated to the Local Government Board, and Metropolitan Asylums Board, the following resolution:—"Resolved, that the Local Government Board be urged to press for the passing of an enactment by the Legislature, empowering the managers of the Metropolitan Asylum District to fulfil the obligations placed upon them by Parliament, in such a manner as shall ensure for the metropolis sufficient and suitable accommodation for the reception and treatment of persons suffering from infectious and contagious diseases, without such managers being restricted in the performance of their duties by the operation of the law, in compelling them to discontinue the use of hospitals erected for the purposes of and under the provisions of the Metropolitan Poor Acts."

The Corporation of the City of Liverpool have published a series of amendments which they propose to add to their Building and the Sanitary Acts. Provision is made in these proposed amendments for the removal of offensive matter from the sites of new buildings or for covering the site with a layer of concrete. Provision is also made for the notification of infectious diseases to the medical officer of health by occupiers of houses or persons in charge of the case, medical men in attendance being required to give, under penalty for omission, a certificate of the malady to the occupier or person in charge, and to receive a fee of 2*s.* 6*d.* for the same, one certificate only to be recognised, for the purpose of fee, for the same disease in the same building, within an interval of thirty days.

At one of the police courts south of the Thames a workhouse official recently reported that the soup issued to the occupants of the workhouse was the same as that supplied to the guardians' table. This public statement excited no little surprise and—shall we say—alarm among the guardians, and became a subject of discussion at their next meeting, when, happily, both their wounded feelings and disturbed stomachs were soothed by the discovery that the workhouse official had meant to say the "master's" table, and had no intention of imputing an action so derogatory to the dignity of a guardian as consuming workhouse soup.

In a series of cases of members of the Anti-vaccination League summoned before the Brighton magistrates recently for disobeying orders for the vaccination of children, one of the defendants objected to the administration of the oath to the vaccination officer on the asserted ground that he was an atheist. This allegation was indignantly denied by the vaccination officer; whereupon the defendant, in justification of his allegation, observed, "that those who ignored the perfection of the Almighty's handiwork, as did the supporters of vaccination, were just as atheistic as those who repudiated the existence of a Supreme Being" (!)

The elderly paupers in the Fulham-road workhouse have recently addressed a complaint to the Local Government Board of being kept in the house when they were wishful to go out and seek work. As some of the complainants are paralytic and others very aged, the Local Government Board has turned a deaf ear to the complaint. The guardians have, indeed, been stopping the usual outdoor leave of the workhouse residents during the prevalence of small-pox, and the Central Board has approved of their action in this respect.

It is announced that the West Ham Local Board have awarded their engineer and surveyor, Mr. Lewis Angell, an honorarium of two hundred guineas and increased his salary to £800 per annum, no limitation being placed on his private practice.

An association of local boards of health in the kingdom is in the course of formation, and will be particularly devoted to the consideration of subjects in which local boards have a common interest.

The Local Board of Twickenham have applied to the Local Government Board for sanction to borrow an additional sum of £10,000 for works of sewerage. About £70,000 has already been expended on the sewerage of the district.

VITAL STATISTICS.

HEALTH OF ENGLISH TOWNS.

The rate of mortality in our largest towns continues to increase. During the week ending last Saturday 5229 births and 3317 deaths were registered in twenty of the largest English towns. The annual death-rate in these towns, which had steadily increased during the five preceding weeks from 17·9 to 22·0, further rose last week to 22·8. The lowest rates were 17·2 in Wolverhampton, 17·5 in Portsmouth, 18·6 in Bristol, and 18·8 in Leeds; the rates in the other towns ranged upwards to 24·3 in Plymouth, 26·0 in Oldham, 27·6 in Hull, and 28·4 in Liverpool. The mean death-rate in these towns during the past five weeks has differed but slightly from the average rate in recent corresponding periods. The deaths referred to the principal zymotic diseases in these towns further rose last week to 537; they included 187 from scarlet fever, 100 from "fever" (principally enteric), 79 from measles, 52 from whooping-cough, 47 from diarrhœa, 28 from diphtheria, and 14 from small-

pox. The annual death-rate from these zymotic diseases averaged 3·7 per 1000 in the twenty towns, and ranged from 0·6 and 1·4 in Norwich and Wolverhampton, to 5·3 in Brighton, 5·9 in Liverpool, and 12·8 in Hull. Scarlet fever continues the most fatal zymotic disease in the towns, and showed the largest proportional fatality last week in Hull, Nottingham, and Brighton; 36 more fatal cases were recorded in Hull, in which town no fewer than 393 have occurred since the beginning of July last. The 28 deaths from diphtheria in the twenty towns included 13 in London and 8 in Portsmouth. The deaths referred to "fever" showed a further general increase, the largest proportional excess occurring in Brighton. Small-pox caused 15 more deaths in London and its suburban districts, one in Liverpool, and one in Newcastle-upon-Tyne. The number of small-pox patients in the metropolitan asylum hospitals, which had been 455 and 453 on the two preceding Saturdays, were again 453 at the end of last week; these included 144 in the *Atlas* hospital ship, and 66 in the Convalescent Hospital at Darenth. The new cases of small-pox admitted to these hospitals were 76 last week. The deaths referred to diseases of the respiratory organs in London, which had steadily increased in the nine preceding weeks from 115 to 376, were 375 last week, and corresponded with the corrected weekly average. The causes of 67, or 2·0 per cent., of the deaths in the twenty towns last week were not certified either by a registered medical practitioner or by a coroner. The proportion of uncertified deaths, which did not exceed 0·9 per cent. in London, averaged 3·2 per cent. in the nineteen provincial towns. All the causes of death were duly certified in Portsmouth and Plymouth, whereas the proportions of uncertified deaths were largest in Sunderland, Salford, and Leeds.

HEALTH OF SCOTCH TOWNS.

The annual death-rate in the eight Scotch towns, which had been equal to 21·4 and 21·6 per 1000 in the two preceding weeks, was equal to 21·1 last week, and was 1·7 below the average rate in the twenty large English towns. The deaths referred to the principal zymotic diseases in these Scotch towns, which had been 79 and 95 in the two previous weeks, declined again to 87 last week; of these, 31 resulted from diphtheria, 21 from diarrhœa, 16 from scarlet fever, 8 from "fever," 7 from whooping-cough, 6 from measles, and not one from small-pox. The annual death-rate from these zymotic diseases averaged 3·8 per 1000 in the eight towns, and was almost identical with the average rate from the same diseases in the twenty English towns; this zymotic rate ranged from 1·0 in Aberdeen to 5·1 and 5·3 in Leith and Greenock. The 31 deaths referred to diphtheria showed a marked increase upon recent weekly numbers, and included 19 in Glasgow, 14 in Edinburgh, and 4 in Greenock. The 21 deaths from diarrhœa were equal to a death-rate considerably exceeding that which prevailed in the English towns. The 16 fatal cases of scarlet fever included 4 in Glasgow, 6 in Edinburgh and Leith, and 4 in Dundee. Five of the 6 deaths from measles occurred in Glasgow, and the 8 referred to "fever" included 5 in Glasgow, and 2 in Edinburgh. The deaths attributed to acute diseases of the lungs (bronchitis, pneumonia, and pleurisy), which had been 103 and 99 in the two preceding weeks, rose to 134 last week, and were equal to an annual rate of 5·8 per 1000, against 4·7 from the same causes in London.

HEALTH OF DUBLIN.

The rate of mortality in Dublin, which had been equal to 18·2, 21·9, and 23·0 per 1000 in the three preceding weeks, further rose to 30·5 last week. The 204 deaths in the city last week showed a further increase upon recent weekly numbers, and included 16 which were referred to the principal zymotic diseases, against 12 in each of the three previous weeks; of these, 6 resulted from "fever," 4 from measles, 4 from diarrhœa, and 2 from scarlet fever. The annual death-rate from these zymotic diseases was equal to 2·4 per 1000, while the rate from the same diseases was 3·6 in London and 3·2 in Edinburgh. The fatal cases of fever, scarlet fever, and diarrhœa exceeded the numbers returned in recent weeks. The deaths of infants showed a marked increase, and considerably exceeded the number returned in any previous week of the year; the deaths of elderly persons were also more numerous than in recent weeks.

HEALTH MATTERS GENERALLY AT HOME AND ABROAD.

"PARANGI DISEASE."

The Government of Ceylon have caused to be published an official report by W. R. Kynsey, Esq., Principal Civil Medical Officer, and Inspector-General of Hospitals, Ceylon, on the "parangi disease" of that island. We are chiefly indebted to Dr. Gavin Milroy for the recent investigations which have been made as to the nature of this perplexing malady. Mr. Kynsey's report in the introduction contains a careful account of previous inquiry as to the parangi disease, and in the report itself presents us with an admirable statement of the present knowledge of the subject. The parangi disease, Mr. Kynsey tells us, simply means the disease of foreigners or strangers. The name indicates the importation of certainly one disease, if not more, about the time the Portuguese took possession of Ceylon. The term is now applied to syphilitic disease in all stages and forms, to frambœsia or yaws, or to a disease closely allied, to which the term "parangi," if retained, should be restricted, to lupus, and ordinary scrofulous alterations with enlargement of glands, and to common forms of skin disease. Mr. Kynsey, following Dr. Gavin Milroy, would ally the disease to yaws, observing: "Frambœsia or yaws is the disease to which parangi bears the most striking likeness. The history of both is identical, and the minor points of dissimilarity may be easily accounted for by ascribing to the climate and surroundings generally some modifying influence." As we have seen, he would restrict the term "parangi" to the form of the disease bearing these characteristics. He describes the disease as passing through four stages: (1) a stage of incubation or latency, unmarked by any peculiar phenomena, and varying in duration from two weeks to as many months; (2) a stage comprising the premonitory fever, the earliest indication of constitutional disturbance, and which generally terminates with the evolution of the eruption—viz., in a period varying from two to seven or eight days; (3) a third stage commences with the eruption and terminates with the complete evolution of the disease or its passage into the fourth stage, or that of the sequelæ. The two last stages together cover a considerable period, in some cases as many as six or eight years. The eruption assumes a papular, rupia-like, condylomatous, or ulcerative character. "In the rupia or rupia-like form the crust loosens gradually, and falls off, or is removed, exposing a sore underneath. This sore is, as a rule, exceedingly clean and healthy, the granulations standing out individually, and it appears like a raspberry, or, when magnified, 'the edible portion of a pomegranate.'" When the disease passes on to its fourth stage "the eruptions break down, the subjacent ulcers become unhealthy, spread rapidly, destroying the skin to great depths, the discharge becomes profuse, the pain great, the desire for food abolished, emaciation ensues, and the general health of the patient suffers so much that he is no longer proof against, nor able to combat, ordinary inflammatory diseases (an attack of diseases of this class generally is the last event of his life). When the patient survives the fourth stage, and the ulcers heal, the most horrible distortions and deformities ensue from the contraction of the cicatrices, and render him a misery to himself and his surroundings. All these and various diseases of the bones, &c., may be correctly ascribed to the abuse of a remedy which in skilful hands contributes to the cure of the disease—mercury." Little doubt is entertained of the communication of the disease to healthy persons by the discharges from the ulcerations of the sick. Mr. Kynsey sees no evidence of the connexion of parangi with syphilis or any relation, as has been maintained, with lupus or leprosy. The conditions under which the disease is found suggest that it is a cachexy of malnutrition determined by the innutritious food, filthy habits, and wretched state of habitation under which the native population exists. One special fact of prevalence is, however, noticed—namely, that "the geographical distribution of the disease in the island is that of deficient water-supply and the use of artificial tanks for the storage of water." On this Mr. Kynsey observes: "This is no mere coincidence. It seems to be of considerable etiological significance as pointing to the water as faulty, and probably causative of the disease." Parangi has played, and still plays, an important part in the depopulation (such is the phrase) of certain districts in Ceylon, and Mr. Kynsey, taking a large view of the subject, looks to men-

sures for its arrest, chiefly in efforts made to elevate the habits of the people in the cultivation of foods, and the adoption of a more varied and generous diet, as well as to the improvement of the sanitary conditions under which the natives live, and of the water-supply when necessary. Mr. Kynsey's report is altogether a very valuable addition to our knowledge of a most perplexing disease, and it is greatly to be regretted that the Ceylon Government should have detracted from its value by not giving with the official copies reproductions of the drawings with which the original report appears to have been illustrated.

FEVER AT UMRITSUR.

Although, by the latest reports from India, cholera has almost entirely abated in the Punjab, we find that a fever, described in some of the local papers as "choleraic fever," still continues to ravage the city of Umritsur, distant twenty miles from Lahore. The natives were dying at the terrible rate of 200 a day. No special cause has as yet been assigned for the outbreak, except that the rainfall had been almost unprecedentedly high, stirring up malaria; the insanitary condition of the city, and of the numerous tanks and dhabs which have in the course of years become filled with a seething mass of filth and corruption, contributing to the unwholesome state of affairs. The medical staff has been reinforced, new dispensaries opened, and a large number of native hospital assistants and assistant surgeons employed in the city to distribute medicines and medical relief. The sickness and mortality have been confined chiefly to the natives, the European troops being as healthy as they usually are at this sickly season of the year.

HEALTH CONDITION OF QUETTAH.

A correspondent writes:—"Last year there were some cases of enteric fever treated at Quettah, but this year the admissions and deaths have been appalling. As this is the case, and the sickness and mortality from other causes—remittent fever, diarrhœa, dysentery—so great, Quettah bids fair to be anything but a sanitarium. Last year the place was a mere waste, with a few mud huts about, and a mud fort. Now it is fast growing in dimensions, barracks and houses, such as they are, are cropping up in all directions; but as the sites are contaminated by the existence of previous latrines on the trench system for the large bodies of troops passing through, it is questionable whether the money so spent is devoted to any good purpose, or wasted and likely to do harm."

YELLOW FEVER.

The two medical men sent to Barbadoes by the Army Medical Department to fill vacancies caused by death have, we regret to learn, already fallen victims to the yellow fever now prevalent in the island.

In Lady Anne Blunt's work "A Pilgrimage to Nejid" (vol. i., p. 9) occurs the following observation, which deserves to be recorded. Writing of a spring at a halting place in the wilderness, she says:—"The water is sweet and good, as might be perceived by the insects which were swimming about in it. The Arabs always judge of the wholesomeness of water in this way. There is nothing more suspicious in the desert than perfectly clear water, free from animal life."

THE SERVICES.

ARMY MEDICAL DEPARTMENT.

A revised schedule of qualifications necessary for candidates desirous of obtaining commissions in the Army Medical Department, with the conditions of service, has just been issued from Whitehall-yard. It differs in no material point from the previous schedule. All the information respecting officers in Class B has been omitted, as being inapplicable to those who may now enter the service; and the regulation by which precedence is given to brigade surgeons over surgeons-major holding the same relative military rank, has been inserted. The conditions of service appear to be stated with sufficient clearness and precision.

VOLUNTEER ENGINEERS.—1st Lanarkshire Corps: Surgeon James Stark is granted the honorary rank of Surgeon-Major; dated July 1st, 1881.

VOLUNTEER RIFLES.—The undermentioned surgeons are granted the honorary rank of Surgeon-Major:—Douglas Maclagan, M.D.; dated July 1st, 1881. Patrick H. Watson, dated July 1st, 1881. 2nd Lincolnshire Corps: Surgeon Edwin Morris, M.D., is granted the honorary rank of Surgeon-Major; dated July 1st, 1881.

ADMIRALTY.—Staff Surgeon Bradley Gregory has been promoted to the rank of Fleet Surgeon in Her Majesty's Fleet, with seniority of October 29th, 1881.

The following appointments have been made:—Staff Surgeon James W. Fisher, to the *Iron Duke*, additional for Yokohama sick quarters; Surgeon Alexander Mitchell, M.D., to the *Warrior*, additional for temporary service in the *Banterer*.

THE MINERAL WATERS OF HARROGATE.

PROFESSOR THORPE, of Leeds, has contributed to the October number of the *Journal of the Chemical Society* the first results of an investigation of the mineral waters of Yorkshire, which, assisted by several experienced chemists, he has recently undertaken. Judging from the first report, which deals chiefly with the waters of Harrogate, this investigation will possess the highest interest, for the analyses have been performed very carefully and minutely; and Professor Thorpe proposes to repeat them frequently, in order that any changes of composition which may occur shall be noted. Among the other notable waters in Yorkshire are mentioned those of Askern, Thorp-Arch, Croft, Scarborough, and Hovingham. Many of these have not yet been analysed. Professor Thorpe's account of the Harrogate waters is so interesting that we reprint it entire. We wish we could do as much for a good deal of the matter which follows:—

"Probably no part of England, or indeed of the British Isles, is so rich in remarkable mineral springs as Yorkshire. The virtues of the Harrogate waters have been known and esteemed for more than three centuries, since the discovery, in fact, of the Tewitt Well by Captain Slingsby, in 1570. The old sulphur well is still without a rival among hepatic waters. So far as is known, no water in the world is so strongly chalybeate as the Chloride of iron Spa of Harrogate; indeed, there are only two other springs in Europe which are believed to contain this particular salt of iron: they are the Selkenbrunnen at Alexisbad, and the water of Bahowina in Silesia. Very remarkable, too, is the existence of relatively large quantities of barium chloride in many of these springs; the presence of this compound in several of the Harrogate waters was first pointed out by Mr. R. Hayton Davis. Perhaps no locality in England can show such an extraordinary sight as that of the bog field in Harrogate, where, in a space of some half dozen acres, springs of the most widely different character—magnesian, sulphuretted, chalybeate, &c.—are found to rise within a few yards of one another."

The first water noticed is the old sulphur well. This was analysed by Prof. Thorpe in 1875, but the results are here reproduced for comparison. Its temperature was 9° C.; its specific gravity at 16·8° was 1011·04, and it contained in each gallon 1047·561 grains of solid matter, besides 3·772 grains of free sulphuretted hydrogen. The total quantity of sulphuretted hydrogen, free and combined, was 6·935 grains; the combined being reckoned as 5·215 grains of sodium sulphydrate (NaHS). Of other constituents, we find barium chloride, 6·566; calcium chloride, 43·635; magnesium chloride, 48·281; potassium chloride, 9·592; lithium chloride, 0·753; ammonium chloride, 1·031; sodium chloride, 893·670; magnesium bromide, 2·283; magnesium iodide, 0·113; besides other constituents of less moment. The absence of sulphates is, of course, explained by the presence of barium. A table follows, which gives all published analyses to the present time. From this table it appears that no important alteration has taken place in the temperature or composition of the spring during the last century. Next follows an analysis by Mr. Bothamley of the water of the Chloride of Iron Spa. This contains 479·754 grains of solid matter per gallon. Of this we find ferrous carbonate, 11·050; ferrous chloride, 13·213; barium chloride, 5·204; barium sulphate (which is not absolutely insoluble), 0·222; calcium chloride, 94·015; magnesium chloride, 57·315; magnesium bromide, 0·344; manganese chloride, 0·971; sodium chloride, 277·561; strontium

chloride, 0·624; with traces of copper, iodine, &c. Previous analyses differ greatly, particularly that of Hofmann in 1854. Hofmann found only about one-sixth of the iron now present: a fact which will give particular interest to future analyses of the water.

The water of the Montpellier strong sulphur well resembles that of the old sulphur well, but has some curious points of difference. That of the Boston Spa, Thorp-Arch, is, on the whole, less interesting.

ROYAL COLLEGE OF SURGEONS.

AT an ordinary meeting of the Council of the Royal College of Surgeons of England, held on Thursday last, the report of the Committee appointed to consider the questions of the Medical Acts Commission was presented, and, after some discussion, adopted. The report practically recommended the establishment of a Conjoint Scheme. No person should, it stated, be registered as a legally qualified medical practitioner unless he shall have passed an examination in Medicine, Midwifery, and Surgery, such examination to be conducted by two or more of the existing corporations. The report also suggested that no University should be allowed to grant registrable licences in Medicine or Surgery apart from its degrees in Medicine. The Committee was unable to agree what changes, if any, should be made in the Council of the College.

Mr. Croft was admitted a member of the Court of Examiners.

It may be stated that the library of the College will be closed to-day (the 11th) and to-morrow, as well as on Friday and Saturday next week.

Correspondence.

"Audi alteram partem."

OPERATION IN CASES OF DISEASED JOINTS WHERE PHTHISICAL SYMPTOMS EXIST.

To the Editor of THE LANCET.

SIR,—The subject of removing by operation the diseased joint in instances of concomitant phthisical mischief, brought forward by Mr. Bryant and so forcibly commented upon by yourself, is one of the greatest possible importance, and one in which all surgeons, who have much to do with joint disease, must take great interest. The case forwarded by Mr. Bryant confirms the views of those who do not consider the existence of tubercular disease of the lung to be an insuperable objection to the removal by operation of a diseased joint, where it is evident that the local sufferings are so great that the patient has no chance of recovering from the systemic malady. It has occurred to me to meet with several instances of joint disease where there was at the same time unmistakable evidence of lung mischief, and where, the local disease being removed, the patients have recovered and got rid of their pulmonary symptoms. I would, however, go even farther than Mr. Bryant—for I gather from his observations that he would confine his operation to amputation, and would not recommend the partial operation of excision in instances of this nature,—and would not hesitate to perform excision of a joint even under such circumstances. I have witnessed excellent results from this practice after excisions on the elbow and hip. One striking instance will doubtless be remembered by many of the present and former pupils at King's College, as occurring in the person of a very eccentric Irish tailor who came into the hospital under my care with extensive disease of the elbow-joint and well-marked symptoms of tubercular phthisis. I took this case into very careful consideration, and finding that the joint disease was producing great local distress, and taking away all chance of any reparation in his lung, I performed excision of his elbow. An extraordinary improvement took place soon after the operation; the wound rapidly healed, the phthisical symptoms declined and ultimately disappeared, and the man very frequently paid a visit to the hospital, and amused us all by the eccentric manner in which he used to display the recovered movements of his arm.

There are also certain instances of lardaceous disease of the liver where, after an operation on the hip, this condition will diminish or disappear.—I am, Sir, yours truly,

Wimpole-street, Oct. 31st, 1881. HENRY SMITH.

TRAVELLING, WATER-DRINKING, AND TYPHOID.

To the Editor of THE LANCET.

SIR,—In these days of water-drinking and much travelling it seems as if "total abstainers" are exposed to greater danger than other people, through having no means of ascertaining whether their favourite beverage be pure and harmless, or whether it be simply diluted sewage, abounding in germs of dangerous diseases. At home men may, and those of a prudent sort do, nowadays make inquiry as to the purity of the water they drink, though it is singular how often we find that those who are prudent in ordinary affairs, who are careful in having their food of the best and wholesomest kind, and who are critical to a degree over the flavour of their claret or sherry, and minutely observant of the amount of acidity which may be present, are utterly careless in the matter of water, and will swallow, without the least misgiving, quantities of a fluid which may contain the most filthy and noxious ingredients; but the traveller, even though he be anxious on this point, is without the means of knowing whether the water he drinks is good or bad. Most commonly, and on the Continent especially, it is bad. He is in a dilemma. Either he must drink water of the quality of which he knows nothing, or he must go without. He must incur the risk of being laid up with a dangerous malady, or suffer the discomfort of thirst. Wine, the only safe beverage when travelling abroad, perhaps he will not drink, and tea or coffee may at the time be unattainable. He must drink something, and thus, with a trust which is touching to witness, he imbibes the water offered to him, hoping that no evil will come of it. The more he travels the more varieties of water he consumes, and the greater becomes the risk of his falling a victim to fever. The water-drinking traveller is not unlike to one who might chance to go into a chemist's shop, and, without any knowledge of drugs, help himself to the contents of the first bottle that came to his hand. How, it may be asked, is this danger to be avoided by those to whom water is a necessary of life? There are two modes of ensuring safety in this respect, either of which I always adopt when travelling. The first is never to drink water without previous boiling, and for this purpose a small case containing a kettle and spirit lamp is most useful. By their means a pint of water can be boiled and a cup of tea and coffee made in a few minutes. This on a long journey is most refreshing. The other plan is to be provided with a small bottle of Nessler's test, with which each sample of water can be tested in a wineglass and its purity ascertained in a few seconds. By these methods much of the risk of fever is readily avoided.

As an illustration of the value of the test I may instance an experience of my last year's holiday journey. In only two of the hotels at which we stayed did I meet with thoroughly bad water, and in these it was of the most dangerous character, and, of course, we carefully abstained from drinking it. On my return homewards, I was asked to see a sick gentleman at an hotel from which we were on the point of starting. He had been very ill during the night, having arrived the previous day. I found him suffering from a severe attack of typhoid fever, from which I subsequently heard he made a good recovery. It turned out that about a fortnight previously he had stayed at the two hotels where I had found the water so foul, and there he had beyond doubt contracted his illness.

It has occurred to me that it might be an essential service to the general public if they could be provided with a simple and easy means of distinguishing the worst specimens of water. If ten or fifteen drops of Nessler's test were enclosed in a thin glass capsule and hermetically sealed the fluid would keep for a length of time. A dozen or so packed in a box with sawdust and with full directions for use would form a valuable addition to the traveller's outfit. One of the capsules broken in a wineglass and a spoonful or so of the suspected water added would show at once if it were of a

dangerous nature, and thus might be the means of saving life.

I cannot doubt that it would well repay any manufacturing chemist to prepare these capsules, which will certainly meet one of the great wants of the age, and of travellers especially—viz., the means of distinguishing good water from bad.

I am, Sir, yours truly,

King's Lynn, Oct. 28th, 1881. JOHN LOWE, M.D.

THE HOSPITAL AMBULANCE QUESTION.

To the Editor of THE LANCET.

SIR,—Respecting the "disgrace to our civilisation," as you so properly characterised it in your editorial reference on the 5th instant to the Hospital Ambulance needs in the metropolis of London, you will learn with pleasure that after several months of effort towards the introduction of a Hospital Ambulance system practicable throughout this metropolis, I have found the idea has outside the hospitals met with uniform appreciation, sympathy, and enthusiasm. By Sir Edmund Henderson, chief of the Metropolitan Police, I am authorised to state to all hospital authorities and others whom it may concern that he is in sympathy with the idea, and in every way possible to him his practical co-operation may be relied upon. To the treasurer of one of the largest London hospitals I have recently, at his request, sent such letters as will facilitate his seeing for himself in the shortest time the working of the ambulance system in New York. While various interviews have been had with the authorities of certain other hospitals, there are two facts which will have for you substantial interest:—

1st. The first horse ambulance waggon for this service is already in a very advanced stage, under my directions, at a London carriage-builder's, which when completed will be seen to possess points of advantage beyond the ambulances in New York, and different from anything before attempted.

2nd. This ambulance will at once be employed by one of the largest general hospitals in London.

If the experience with the Hospital Ambulance system only approaches in London that which everywhere else has been uniform, the "disgrace to our civilisation" you so ably commented on may, let us trust, soon be removed.

With many thanks for your co-operation,

I am yours faithfully,

Grand Hotel, London, Nov. 8th, 1881. BENJAMIN HOWARD.

ERECT DORSAL SUPPORT FOR THE TREATMENT OF DEFORMED SHOULDERS IN YOUNG GIRLS.

To the Editor of THE LANCET.

SIR,—Owing to the success I have had in the treatment of bow-legs in children with the poroplastic felt, and encouraged by so many good surgeons having adopted it in both hospital and private practice, I have been induced to try it, and successfully, in the above very common affection, although not altogether coming under the head of disease, but which leaves such a number of young girls an anxiety to their parents and a disgrace to this advanced state of civilisation when they have emerged into womanhood and begin to show their figures, more especially now at this period when figures are so exhibited, either real or imaginary. Why do we see so many with a stoop; one shoulder from an inch to two inches lower than the other; one scapula most perceptibly prominent and lower than its fellow; one side of the waist nearly straight when the other is sunk in, making to all appearance a raised hip at that side? All for want of a simple apparatus, if I may so call it, when the mischief is going on, and which occurs oftener from bad habits than disease. A course of calisthenics and deportment are practised in schools as a remedy to make and improve the figure, but which I consider, in many cases, cruel and highly injurious to the girl. In attempting to treat this state of things, I do not discard medical treatment where it may be considered necessary, but my object is to prevent the deformity under all circumstances, whether arising from disease or otherwise.

There are many kinds of splints and appliances made and sold to be worn on the back and shoulders for this purpose; but I have seen none yet sufficient to counteract the stoop to the shoulders and act as a comfortable support, unless we resort to Cocking's poroplastic jacket, which mine (that I am about to introduce) is a modification of, and which will produce the same desired effect with a much lighter quality of his material, at the same time doing away with all the front portion of it, which to young girls especially is the hard part to be borne. Even in incipient spinal cases it is quite sufficient, without encroaching in the least on Cocking's jacket, which is a most admirable appliance in actual spinal curvature; besides, the ventilation must be so much greater with the half-jacket, as well as the bulk to the figure being so much less—a great consideration to the young girl, who may readily be induced to wear it.

I introduce a woodcut here, which will explain it better than I can describe. The weight of the whole apparatus is

only about eight ounces, with a corset arrangement in front, which may be adapted according to the development of the figure, or as necessity may require, with two suspender bands from the shoulder crossing the chest. It is as easily applied as a common corset, which there is no necessity of wearing with it; nor does it perceptibly increase the bulk of the figure. Such an advantage gained by keeping the patient in a perfectly straight position, without impeding the motion of her head or extremities in the slightest, is the object it aims at, and which has been carried out by Mr. Ernst, who has manufactured it for me. I have no hesitation whatever in recommending your readers to try it in the above affections.—I remain, your obedient servant,

Chelsea, November, 1881. H. FISHER, M.D.

THE QUEEN'S UNIVERSITY IN IRELAND AND THE MANY-PORTAL SYSTEM.

To the Editor of THE LANCET.

SIR,—Your notice of the last conferring of degrees by the Queen's University, held in St. Patrick's Hall, Dublin Castle, in conjunction with your leader on the Royal Commission on Medical Acts, afford material for reflection on the medical work this University has been doing. Its quality and influence on medical education generally, and how the existence of multifarious inferior examining bodies may mar such work, we may glean from the examination statistics quoted by the Chancellor of the University, the Duke of Leinster. And, first, I notice that out of about 600 students matriculated in the Medical Faculty, only some fifty proceed to the degree in Surgery—an honour examination, certainly, as it is fashioned after the F.R.C.S.E. examination in scope and severity of test, but still essential, if to be doubly qualified from the same source is required—that is, not more than ten out of every hundred of its medical undergraduates obtain the surgical degree. The percentage is but little higher for the better known degree of M.D. The question at once suggests itself, From where do the ninety per cent. obtain their qualifications to practise? The answer is, From Edinburgh and elsewhere. Now, why does this unnatural and undesirable state of things exist here, as it no doubt exists to a greater or less extent at all universities in proportion to the severity of their respective examinations? Lazy or sieve-brained students will not undergo the labour necessary to pass the Queen's examinations if there is an easy loophole for escape. No slight labour, certainly, to pass one of the most thorough and searching examinations of any board in the United Kingdom, only equalled, perhaps, by

that of the London University, the examiners of which in the subjects of anatomy and surgery—viz., Professor Redfern and Sir William Mac Cormac, both Queen's men—they have in common with the Queen's University; but still, an examination that a student with fair abilities could expect to get through with the help of the admirable teaching to be obtained at any of the Queen's Colleges in Ireland. This more careful preparation for the culminating part of its educational scheme, the students would be compelled to go through, even if it took them six or seven years, were it not for these minor licensing bodies. Who shall say that the profession and the public are not the losers thereby? It is not expected in the present day in this country that all medical men should possess a university degree, but it would be well that all those who undergo a university education should proceed to the examinations of their *alma mater*, necessitating for their successful issue a wide range of subjects, including the collateral sciences with their bearing on medical questions, in acquiring a knowledge of which they have the concomitant advantage of the formation of habits of accuracy in details. One of the reasons why the Queen's University was enabled to maintain its high standard was that it was not dependent on examination fees for its support, nor could its examiners be influenced by golden visions of large dividends to be obtained from increased number of candidates; and more, the fee was within the reach of the most impecunious of ambitious students. Now, it is to be regretted that a university so happily placed, and so consistently adhering to its high standard of what a university degree in medicine or surgery should mean, and its work necessarily influencing for good rival institutions, should be summarily disposed of and dissolved in order to remove, or rather to fail to remove, jealousy on the part of a portion of the Catholic community. For this, the University, a victim to unrest and one-sided agitation, fell, and an examination board is substituted. They asked for a Roman roll in the place of whole meal, and they have been given a stone. And the country has lost an improving and potent educational system, ever widening its influence, in the Queen's University in Ireland. Long may her 7800 children do honour to her name.

Yours truly,

Plymouth, November, 1881. AUGUSTUS H. BAMPTON.

PROFESSOR VIRCHOW'S TESTIMONIAL.

To the Editor of THE LANCET.

SIR,—Allow me to acknowledge in your columns the following subscriptions, in addition to those previously announced, towards the above testimonial; and to urge intending subscribers to communicate with me on the subject with as little delay as possible.

Ernest Hart, Esq.	£1	1	0
Felix Semon, Esq.	1	1	0
F. J. Mouat, M.D., F.R.S.	5	5	0
W. Aitken, M.D., F.R.S.	2	2	0
Sir W. Gull, Bart., F.R.S.	2	10	0
E. Bronner, Esq.	1	1	0
Bisset Hawkins, M.D., F.R.S.	2	0	0
Samuel Wilks, M.D., F.R.S.	1	1	0
Sidney Coupland, M.D.	1	1	0
N. Montefiore, Esq.	2	2	0
G. H. Philipson, M.D.	1	1	0
D. Drummond, M.D.	1	1	0
J. Marion Sims, M.D.	2	10	0

I am, Sir, your obedient servant,

Old Burlington-street, Nov. 10th, 1881. J. S. BRISTOWE.

"SPECIALISM IN MEDICINE."

To the Editor of THE LANCET.

SIR,—Some specialties seem to have got a firm footing amongst us, and it would not be fair to deny that, honestly practised, they are of service to the profession and the public. But I venture to suggest that in most, if not all, cases the specialist should be a consultant pure and simple and his advice sought only in conjunction with the ordinary medical attendant, or on the recommendation of an "all-round" physician or surgeon.

Your obedient servant,

November, 1881. F.R.C.P.

THE ST. JOHN AMBULANCE ASSOCIATION.

To the Editor of THE LANCET.

SIR,—Having this year held Ambulance lectures in connexion with the St. John's Society for Men and Women, in addition to a course for volunteers, may I be allowed as one of its humble supporters to give "Country Practitioner" a few ideas on the subject?

The prospectus I have before me must be a very different one from that which he has seen, for instead of there being, as he says, "an almost entire absence of medical men in its list of patrons and supporters," I find that out of twenty-three names mentioned as being deputy chairmen, no fewer than ten, or nearly half the number, are medical men, and such well-known names as Dr. Lionel Beale, Surgeon-General Longmore, and Dr. Sieveking figure in the list; in the various local branches, too, medical men's names do appear on the various committees, and it must be borne in mind that the lecturer is generally an *ex officio* member of committee.

What points in the Society's programme does "General Practitioner" consider "highly objectionable"? The Society itself says that *first aid* is the only thing to be taught, and both the examiners and lecturers always impress this forcibly on the mind of their classes—viz., that in a case of accident or sudden illness the first thing to do is to send at once for a medical man. Surely there can be nothing objectionable in showing a person how to use artificial respiration in a case of drowning, following in this instance the example of the Royal Humane Society, who most advisedly send their charts illustrating the Marshall Hall and Silvester method to the various stations of the army and navy, and elsewhere. Is it, too, "highly objectionable" to show a person how to stop the various kinds of hæmorrhage? Or would it be less objectionable to allow a person to bleed to death from a burst varicose vein (as happened in this town a few months since), while awaiting the doctor's arrival? Is it, again, "highly objectionable" to show men how to carry a case of fracture gently, or women how to change sheets, and in other ways nurse the sick? If these are not "highly objectionable," may the Society go on and prosper as it is doing; if they are considered "highly objectionable" by our profession at large, I for one am very sorry I ever had anything to do with the St. John Ambulance Association.

I am, Sir, yours faithfully,

H. GEARY DYER,

Ringwood, Oct. 31st, 1881. Surgeon 2nd Hants R.V.

AN UNSATISFACTORY INQUEST.

To the Editor of THE LANCET.

SIR,—Referring to a paragraph on this subject in THE LANCET of Oct. 29th, 1881, p. 769, let me state my experience.

On Sept. 30th, by the coroner's order, I made an autopsy on the body of A. H——, brought to the London Hospital dead. After a very careful examination of the vital organs, and finding them healthy, with the least possible delay I analysed the stomach and contents, the procedure proving the presence of carbolic acid in considerable quantity. The following morning the evidence of the friends of the deceased and other witnesses went to show that whilst in apparently good health and walking in the street the young man suddenly uttered an exclamation and fell, shortly expiring. Save for the chemical analysis of the stomach made by me, no hypothesis whatever could even have been suggested as to the cause of death. I am remunerated to the extent of *two guineas*.

On addressing the Home Secretary to claim an additional fee for my labour, I am told that "the Secretary of State is informed by the coroner (Mr. George Collier) that in his opinion the case did not present any special features, and that he did not, therefore, apply for authority to incur extra expense for analytical examination."

I fail to see how in my case an analytical examination could possibly have been dispensed with, and I fully sympathise with Mr. Giles Ford in the difficulties he has encountered in his.

Taking into consideration the grave responsibility involved in undertaking a chemical analysis for medico-legal purposes,

as well as the technical knowledge and special skill required for its due performance, every physician who does so undertake it must feel himself aggrieved at the inadequate compensation, to say nothing of the slur cast on his judgment when it is ruled that the coroner, and not he, is to decide as to whether such a mode of investigation is necessary.

I am, Sir, yours truly,

CHAS. EGERTON JENNINGS,
London Hospital, Oct. 31st, 1881. House-Physician.

IRELAND.

(From our own Correspondent.)

DR. J. E. KENNY having been removed by sealed order of the Local Government Board from the position of medical officer of the North Dublin Union, an election for his successor will take place on the 30th inst., at a salary of £150 a year. It was generally supposed that the removal of a medical officer of a workhouse under a sealed order rendered that officer ineligible for any Poor-law medical appointment, dispensary or otherwise; but it appears from the authority of Dr. MacCabe, one of the inspectors of the Local Government Board, that this is incorrect, and that this removal does not prevent his accepting an appointment as dispensary medical officer, though he cannot be nominated medical officer of a workhouse without the consent of the Local Government Board.

The eighth annual collection for the Dublin Hospital Sunday Fund will be held on Sunday next, the 13th inst., when it is hoped that the amount obtained may exceed that of last year, which showed a decrease of nearly £300 as compared with 1879. The hospitals, on behalf of which the appeal is made, receive annually upwards of 11,000 patients, provide medical attendance to some 3000 lying-in women, treat as extern patients upwards of 8000 accidents, and relieve many thousands at their dispensaries. On the last census night there were in the hospitals to which the collections are distributed, 786 patients; and as these institutions could accommodate 1200, it will be seen that the large number of unoccupied beds is due to the want of funds.

The remains of the late Dr. Hayden, who died at the comparatively early age of fifty-seven years, were interred in the Glasnevin cemetery on the 3rd inst.; the funeral was one of the largest of its kind ever seen in Dublin. By Dr. Hayden's death two vacancies resulted—the physiciancy to the Mater Misericordiæ Hospital and the Lectureship on Anatomy and Physiology in the Catholic University Medical School. The first-mentioned of these posts has been filled by the appointment of Dr. Redmond, who was formerly assistant-physician to the hospital, and is the senior demonstrator of anatomy in the Catholic University Medical School.

A meeting of the Fellows of the Royal College of Surgeons in Ireland will take place on Saturday, the 12th inst., pursuant to the provisions of the Supplemental Charter, to elect a member of Council in the vacancy caused by the decease of Dr. McClintock. It is thought that Mr. Butcher will be elected.

On the 29th ult. her Excellency the Countess Cowper and suite visited the National Orthopædic and Children's Hospital, Dublin, and were received by the medical staff and committee. Having inspected the various wards, and presented each child with a toy or book, her Excellency expressed her satisfaction with the hospital as being a most valuable and excellent institution. A new ward will shortly be furnished for the reception of patients, and will be named the "Cowper Ward."

The body of the medical officer of the *Clan Macduff*, Surgeon Creed Smyth, of Cullen Rectory, Tipperary, was washed on shore at Kinsale last week, and identified by his brother, Dr. Arthur Smyth, R.N.

A deputation waited on the Chief Secretary for Ireland on Saturday last, for the purpose of urging upon the Government the necessity of enlarging the accommodation for students at the Queen's College, Belfast, and to obtain a grant in aid of technical education. The president presented a memorial showing the present position and urgent wants of the Belfast College, which it stated had been eminently successful. During the past thirty years 3625 students have been trained there; of whom 715 graduated in arts and 446 in medicine. Of these graduates, upwards of 25 now fill professors' chairs, 31 have entered the Indian Civil Service, some have gained the highest honours in the Universities of London, Oxford, and Cambridge, and large numbers are in the medical service of the Army and Navy. The students have increased so much in numbers that the buildings are now, and have been for several years, utterly inadequate to their proper training. The medical school is the largest in Ireland, containing more than 300 students. The result is that the anatomical class-room and the dissecting-room are so much overcrowded that the professors fear the health of the students may seriously suffer. The memorialists urged on the Government the necessity of providing increased accommodation, with suitable laboratories and scientific apparatus. They had an admirable nucleus for scientific education in the Queen's College. The professors are men distinguished for learning and energy, who are willing and able to undertake the work if only furnished with the requisite buildings and laboratories. The estimated cost of these improvements is £12,000. Mr. Forster stated, in reply to the deputation, that the matter did not lie in his department, as the purchasing and providing of buildings should be done by the Commissioners of Public Works, with the approval of the Treasury. He was of opinion that the Belfast merchants and manufacturers should themselves subscribe, but promised to forward the memorial, and to press upon the Treasury the careful consideration of the matter.

There will be an election for an assistant physician to the Richmond Hospital, Dublin, on the 17th inst., in the room of Dr. Reuben Harvey, who has resigned.

Dr. Stewart of Glasslough has been elected a coroner for the County Monaghan.

Dr. Purser has been elected President of the Biological Association, Trinity College, Dublin, for the ensuing session.

PARIS.

(From our own Correspondent.)

AT the Société Médicale des Hôpitaux M. Féréol related a case of inoculation of syphilis by skin-grafting. A man, aged forty-five, was suffering from an ulcer on the outside of the thigh, resulting from phlegmonous erysipelas. To hasten the process of healing forty-five fragments of skin were transplanted from five different persons, and on two subsequent occasions further grafts were made, first with portions of mucous membrane from a rabbit, and afterwards with human skin from seven individuals. Twenty-three days after the first operation the outer half of the sore was healed, but six days later there appeared a sharply cut greyish ulcer, somewhat smaller than a shilling, which was followed by others of the same character, the new cicatricial tissue being destroyed. In the course of six weeks a specific eruption came out, and dissipated all doubt as to the nature of the case. Subsequently it was discovered that the patient's son, who had furnished some of the skin, had contracted a chancre eighteen months before.

M. Debove makes known a new plan of treating the anorexia and vomiting which so often occur in the latter stages of phthisis. A patient under his care, affected with pulmonary tuberculosis in the third stage, was unable to take food on account of the vomiting induced even by the smallest quantities. Thinking that this might be caused by a disgust for nourishment a quart of milk was introduced into the stomach by a tube. No nausea followed, and the meals were digested perfectly. Eggs and meat were then tried with the same success, and at the present time two quarts of milk, ten eggs, and half a pound of meat are given in this way daily. The vomiting has ceased, the cough and night-sweats have diminished, and the pulmonary lesions seem to have improved. The mean daily gain of weight is 100 grammes. M. Dujardin-Beaumetz said that being aware of M. Debove's experiment he had placed six consumptive patients under this treatment. They used to vomit either after meals or during their fits of coughing. Now they digest their food, gain flesh, and all the symptoms of tuberculosis are improving in a surprising manner.

THE excellent testimonial portrait of Mrs. Elizabeth Twining, painted by Mr. Henry Martin, which was presented to her from Twickenham town, has been now permanently fixed in St. John's Hospital there, as a memorial of the liberal and charitable foundress.

Obituary.

WILLIAM BREWER, M.D., F.R.C.P.

IT is with much regret that we have to record the death of Dr. William Brewer, which took place at his residence, 21, George-street, Hanover-square, on Nov. 3rd, the reported cause being angina pectoris. Dr. Brewer was a graduate of St. Andrews, his diploma of Doctor of Medicine dating from 1834. The same year he became a licentiate of the Royal College of Surgeons, Edinburgh; in 1841 he was admitted to the membership of the Royal College of Physicians, London, and in 1872 he was elected as a Fellow of that learned body. Dr. Brewer does not appear at any time to have followed the practice of his profession, and he chiefly gave his attention to medicine in its sanitary and public health relations, and particularly to the medical aspects of Poor-law administration. As a member of the Vestry of his parish, an active member of the Metropolitan Board of Works, and as Chairman of the Metropolitan Asylums Board, a post which he held from the formation of that Board to the period of his death, his unflagging energy and earnestness in matters concerning the Local and Poor-law Governments of the metropolis will long be remembered and his presence sorely missed. It is to be feared that the difficulties which have in recent years so greatly beset the administration of the Metropolitan Asylums Board exercised a most injurious effect upon Dr. Brewer's health in the later months of his life. He regarded these difficulties as largely touching himself personally, and underwent in consequence an amount of anxiety which has shortened a life which could ill be spared, and which will leave a hiatus in metropolitan local administration difficult to be filled up. A few years ago Dr. Brewer adventured into the field of light literature and published an historical novel illustrative of the reign of Henry VIII., and for which the then recent researches of his late distinguished literary brother, the Rev. J. T. Brewer, of the Record Office, furnished ample materials. The qualified success which this novel met with happily debarred Dr. Brewer from seeking further laurels in this field, and from that time he gave himself up wholly to the difficult questions of the local and parochial administration of the metropolis. In 1868 he entered Parliament, and sat there until 1874 as the representative, in the Liberal interest, of Chelmsford, his birthplace if we err not.

SURGEON-GENERAL E. MAHAFFY, M.D., C.B.

DR. MAHAFFY, whose lamented death we announced in our issue of Oct. 15th, served in H.M. Dominions, Bombay Presidency, for thirty-six years. He was an L.R.C.P. of Dublin and M.D. of Glasgow. For ten years he was employed by Government (Bombay) to introduce vaccination in the Provinces of Gujerat and Rajpootana. He served during the mutinies in Southern Maratha country and Central India. He accompanied the force to Abyssinia, and was present at the storming and capture of Magdala, for which he received a medal, and was appointed a Companion of the Most Noble Order of the Bath.

Medical News.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following gentlemen passed the Primary Examination in Anatomy and Physiology at meetings of the Board of Examiners on Monday, Tuesday, and Wednesday last:—

Sidney M. P. Roberts, Henry W. M'Connel, and Thomas G. Styan, Cambridge; John H. Brown, University College and Edinburgh; George W. Richards, Newcastle-on-Tyne and London Hospital; John H. Betts, Kingston, Canada; George Byrne, Walter O. Steinthal, and John H. Hacking, Owens College, Manchester; Alfred E. Drury and John Godson, Birmingham; John Weipton, Leeds; H. St. G. Boswell, Aberdeen and Edinburgh; Henry J. Ley, C. D. Kirby, Peter B. Bury, Robert Logan, and George F. Alexander, Edinburgh; Charles J. Sharp and James E. M'Dougal, Liverpool; Archibald B. Gemmel and John M'H. Gell, Glasgow; Bertram Hunt and Henry C. Otway, St. Bartholomew's Hospital; Herman E. Heyd, Montreal; Thomas R. Lowers, Melbourne, Australia; John C. Watson, Aberdeen and Edinburgh; Robt. W. Murray, Guy's Hospital; Alfred Bourne, Newcastle-on-Tyne; T. P. Castaneda, Paris and Madrid; C. H. Dodd, St. Thomas's Hospital; W. H. Hall, University College Hospital; I. R. Barfoot, Phillip J. Nunnerley, and Samual N. Cardozo, Madras; Ernest W. Barnes and Herbert H. Marsden, Liverpool; Wm. A. D. Montgomery, Toronto; Edward A. Opie, Arthur H. Dixon, and Wilfred W. E. Fletcher, St. Bartholomew's Hospital; Richard B. Eskrigge, Manchester; Robert Cuff and James H. Gilbertson, Guy's Hospital; John J. Pitcairn, St. Bartholomew's and Charing-cross Hospitals; M. N. Bannerjee, Bengal and King's College; Frederick E. Abbott, Newcastle-on-Tyne; B. Volckman, London Hospital.

ROYAL COLLEGE OF PHYSICIANS OF EDINBURGH AND FACULTY OF PHYSICIANS AND SURGEONS OF GLASGOW.—At the October sittings of the Examiners the following gentlemen passed the Final Examination and were admitted Licentiates of both bodies:—

Hill, J., London.
Lovegrove, Charles, Liverpool.
Owen, John W., Glasgow.
Wadia, Dhanjibhai Rastamji, Bombay.

FACULTY OF PHYSICIANS AND SURGEONS OF GLASGOW.—At the October sittings of the Examiners the following candidates passed the Final Examination and were admitted Licentiates of the Faculty:—

Bunting, Robert, London.
Cannock, Charles, London.
Duncan, James, Glasgow.
Erskine, J., Glasgow.
Gunn, A. S., Glasgow.
Johnston, D. P., Dublin.
Jones, John, Glasgow.
MacNaughtan, D., Glasgow.
Peake, Benjamin, Glasgow.
Reid, A. F., Glasgow.

The following passed the Primary Examination:—

John G. Anderson, W. A. Cody, W. D. Maclachlan, P. C. M'Niven, and A. F. Wilson, Glasgow; G. C. Bezboroa, Calcutta; Charles Goodden and Henry Gard, London; George Patrick, Manchester.

APOTHECARIES' HALL.—The following gentlemen passed their examination in the Science and Practice of Medicine, and received certificates to practise, on Nov. 3rd:—

Buchan, William Augustus, Plymouth.
Francis, John Arthur, St. Bartholomew's Hospital.
Macmillan, Colin, Nottingham.

The following gentlemen also on the same day passed the Primary Professional Examination:—

Frank Gravely, University College; Hy. Martyn Sutton, St. Thomas's Hospital.

MR. C. C. ALDRED, M.R.C.S., has been elected Mayor of Yarmouth for the fourth time.

BY command of Her Majesty the Queen, 100 lb. of cast-off linen has been sent to the Westminster Hospital from the Ewry Office, St. James's Palace.

THE late Mrs. J. M. Fiske has left 40,000 dollars to establish a hospital at Cornell, U.S.A., for the benefit of the students.

A SUM of £400 has been presented by Lord Derby, President of the University College, Liverpool, to the Medical Faculty of the College, for the purpose of founding a new annual prize for students in that department.

THE Governors of the Bucks General Infirmary have resolved on the erection of two additional wards to the building, in accordance with the suggestion of the Monthly Board.

H.R.H. THE DUKE OF CAMBRIDGE has consented to preside at a dinner early in the new year, on behalf of the Richmond Hospital, Surrey; and it is expected that next summer H.R.H. the Duchess of Teck will open the new wards now in process of completion.

PRESENTATION.—On Thursday, the 27th ult., a complimentary dinner was given by the members of the Birmingham Friendly Societies' Medical Institution to their late medical officer, Mr. John Steel, who is about to leave Birmingham for Australia. Mr. J. Thomas presided, and Mr. Davis was in the vice-chair. Apologies for non-attendance were read from the Mayor, Dr. Heslop, and R. W. Dale, Esq., M.A. In the course of the evening Mr. Steel was presented with a beautifully illuminated address, and a case of surgical instruments, as a token of the esteem in which he is held by the members.

DUBLIN UNIVERSITY BIOLOGICAL ASSOCIATION.—The following office-bearers have been elected for the ensuing year:—President: John M. Purser. Vice-Presidents: Chas. D. Ball, Jno. Barton, Edward H. Bennett, Samuel Haughton, James Little, T. Evelyn Little, Alexander Macalister, Henry W. Macintosh, G. L'Estrange Nugent, G. Pim, R. Wills Richardson, E. B. Sinclair, W. G. Smith, Edward P. Wright, W. A. Wright. Committee: W. H. Bennett, F. W. Drury, F. Elsner, G. Kinsbury, T. Myles, S. T. Scott, R. Sinclair, Bertram Windle. Hon. Secretaries: B. M. Dockrell, T. H. Scott.

THE salary of Dr. Sheen, medical officer of the Cardiff workhouse, has been increased from £120 to £170 per annum.

SURGICAL SOCIETY OF IRELAND.—The following constitute the office-bearers for the ensuing year:—President: Samuel Chaplin. Vice-President: John K. Barton. Council: Edward H. Bennett, William Colles, Anthony Corley, Henry G. Croly, Edward Hamilton, J. Stannus Hughes, Archibald Jacob, Rawdon Macnamara, Edward D. Mapother, Humphrey Minchin, E. Stamer O'Grady, George H. Porter, B. Wills Richardson, William Roe, Wm. T. Stoker, William Stokes, Philip C. Smyly, R. L. Swan, Wm. Thomson, Jolliffe Tufnell, William Wheeler. Hon. Secretary: Jolliffe Tufnell.

THE ROYAL SOCIETY.—The anniversary meeting of the Royal Society will be held, as usual, on St. Andrew's Day, the 30th inst. The following is the list of the Council and officers nominated for election:—President: William Spottiswoode, M.A., D.C.L., LL.D. Treasurer: John Evans, D.C.L., LL.D. Secretaries: Professor George Gabriel Stokes, M.A., D.C.L. LL.D.; Professor Michael Foster, M.A., M.D. Foreign Secretary: Professor Alexander William Williamson, Ph.D. Other members of the Council: Francis Maitland Balfour, M.A.; I. Lowthian Bell, F.C.S.; Sir Risdon Bennett, M.D.; Professor Thomas George Bonney, M.A.; Professor Heinrich Debus, Ph.D.; Alexander John Ellis, B.A.; Sir John Hawkshaw, M.I.C.E.; Thomas Archer Hirst, Ph.D.; William Huggins, D.C.L., LL.D.; Professor Thomas Henry Huxley, LL.D.; Professor Joseph Lister, M.D.; Professor Daniel Oliver, F.L.S.; Professor Henry Enfield Roscoe, B.A., LL.D.; W. Warrington Smyth, M.A., Henry Tibbats Stainton, F.G.S.; Edward James Stone, M.A. Professor Huxley having retired from his office as one of the secretaries, Dr. Michael Foster has been named in his stead.

WIRRAL CHILDREN'S HOSPITAL.—A meeting of the friends and subscribers of this institution was held on Nov. 5th, at the Music Hall, Birkenhead, for the purpose of viewing the competition plans for the new building which it is proposed to erect on the site lately purchased in the Ward-church-road. Thirteen designs were submitted; the first prize was awarded to Messrs. Harvey, Pennington, and Burgess, of Liverpool, and the second, to Mr. John Clarke, also of Liverpool. The Mayor of Birkenhead (Mr. Wm. Laird) took the chair. Mr. Laird, in opening the proceedings, referred to the good work done by the hospital in the past. Mr. Carver, the hon. secretary, made a statement of the progress of the institution. The hospital was now doing 80 per cent. more work than at first, but the income had increased only by about 20 per cent. Latterly, the suitable cases presented for admission had so much increased that it had been found necessary to hire a neighbouring cottage. The management had bought a very excellent and healthy site containing 2000 square yards; and the subscriptions for the new building already received amounted to £3200. Resolutions were carried affirming the necessity for the erection of larger and better premises, and pledging the meeting to earnest endeavours to raise the needed funds.

Medical Appointments.

Intimations for this column must be sent DIRECT *to the Office of* THE LANCET *before 9 o'clock on Thursday Morning, at the latest.*

ASHTON, Mr. C. E., has been appointed Resident Medical Officer to the French Hospital, Leicester-place, Leicester-square, vice Mr. R. A. Busby, resigned.

BILLIALD, R. ATHERSTONE, L.R.C.P.I., M.R.C.S., has been appointed Medical Officer for the Kington District of the Kington Union.

COOPER, ERNEST F., L.R.C.P.Lond., M.R.C.S., has been appointed Assistant Medical Officer to St. Andrew's Hospital for Mental Diseases, Northampton.

FOX, F. COLCOTT, B.A., M.B., M.R.C.S., has been appointed Physician to the North-West London Hospital, Kentish-town-road.

GOPTON, J. EDW., L.R.C.P.Lond., M.R.C.S., has been appointed Medical Officer for the North Shields District of the Tynemouth Union.

GOULD, A. PEARCE, M.S.Lond., F.R.C.S.Eng., has been appointed Surgeon to the North-West London Hospital, Kentish-town road.

LANGTON, HERBERT, M.R.C.S.E., L.S.A.Lond., has been appointed District Medical Officer to the Brighton and Hove Dispensary, vice T. J. Verrall, resigned.

LAYCOCK, Dr. G. LOCKWOOD, has been appointed Physician to the Hospital for Epilepsy and Paralysis, Portland-terrace, Regent's-park, vice Dr. Allen Sturge, resigned.

MARK, LEONARD P., L.R.C.P.Lond., M.R.C.S., L.S.A.Lond., has been appointed House-Surgeon to the Richmond Hospital, Surrey, vice Robbins, resigned.

OSBORNE, HAROLD R., M.R.C.S., L.S.A.Lond., has been appointed Assistant House-Surgeon to the Infirmary for Children, Myrtle-street, Liverpool, vice Mr. Chas. Donkin, resigned.

OSWALD, J. W. JEFFRIES, M.D. St. And., F.R.C.S., L.R.C.P.Ed., has been appointed Medical Officer for the Third District of the Parish of St. Mary, Lambeth.

POWELL, G. B., L.R.C.P.Ed., L.R.C.S.Ed., has been appointed Public Vaccinator to No. 2 District of the Nottingham Union, vice J. H. Webster, L.R.C.P.Ed., M.R.C.S.E., resigned.

REDMOND, JOSEPH M., M.D., M. & L.K.Q.C.P.I., L.M., L.R.C.S.I., Senior Demonstrator of Anatomy at the Catholic University School of Medicine, and one of the Physicians to the Cork-street Fever Hospital, has been appointed Physician to the Mater Misericordiæ Hospital, Dublin, vice Hayden, deceased.

RENNIE, FRANK, M.B., C.M.Ed., has been appointed Medical Officer for the Whitley District of the Tynemouth Union.

RICHARDSON, CHARLES B., M.B., C.M. Aber., L.R.C.P. Lond., M.R.C.S.E., has been appointed Senior House-Surgeon to the Brighton and Hove Dispensary, vice H. Langton, resigned.

TELFORD, A. BARR, M.D.Glas., L.R.C.S.Ed., has been appointed Medical Officer for the Pilkington District of the Bury Union.

THELWALL, LLEWELLYN, L.R.C.P.Ed., L.R.C.S.Ed., has been appointed Medical Officer for the Stilton District of the Peterborough Union.

TWEEDY, CHARLES, M.R.C.S., has been appointed Medical Officer for the Knayton District of the Thirsk Union.

WHISTLER, CHAS. W., M.R.C.S., L.S.A.Lond., has been appointed Medical Officer for the Sixth District of the Sudbury Union.

Births, Marriages, and Deaths.

BIRTHS.

COLEMAN.—On the 7th inst., at Holly Lodge, Streatham, the wife of A. Coleman, F.R.C.S.E., of a daughter.

ORTON.—On the 3rd inst., at Lower Phillimore-place, Kensington, W., the wife of George Hunt Orton, F.R.C.S., M.B.Lond., of a son.

ROBATHAN.—On the 2nd inst., at York Villas, Prestonville, Brighton, the wife of G. B. Robathan, Surgeon, of a son.

THURNAM.—On the 3rd inst., at Yardley-Hastings, Northampton, the wife of F. Wyatt Thurnam, M.B., of a daughter.

MARRIAGES.

OLIVER—JENKINS.—On the 27th ult., at Christ Church, Consett, by the Rev. Thomas Williams, M.A., Vicar of Llanidloes (cousin of the bride), assisted by the Rev. F. Steggall, Vicar of Consett, Thomas Oliver, M.D., of Newcastle-on-Tyne, to Edith Rosina, eldest daughter of William Jenkins, Esq., J.P., of Consett Hall, County Durham.

PURCELL—REEVE.—On the 1st inst., at the Church of the Sacred Heart, Eden-grove, London, Edward Godfrey Purcell, M.D., son of the late Thomas Purcell, Esq., of Limerick, to Anne Dodman Reeve, niece and adopted daughter of Mrs. E. Allen, of Highbury New Park.

SMITH—MANSON.—On the 3rd inst., at Aberdeen, Patrick Blaikie Smith, M.D., Aberdeen, to Helen, third daughter of the late John Manson, Esq., of Fingask, Aberdeenshire.

WHEELER—TASKER.—On the 3rd inst., at St. George's, Hanover-square, by the Rev. R. W. Forrest, D.D., Vicar of St. Jude's, South Kensington, assisted by the Rev. J. Robbins, D.D., Vicar of St. Peter's, Bayswater, John Wheeler, M.D., C.M., of 1, Pembridge-gardens, Bayswater, to Jane Tasker, of Gibraltar.

DEATHS.

BREWER.—On the 3rd inst., at his residence, George-street, Hanover-square, William Brewer, M.D. St. And., F.R.C.P.L., Chairman of the Metropolitan Asylums Board.

FIGGINS.—On the 4th inst., at Crabtree, Sheffield, Henry Figgins, F.R.C.S., late of Birmingham, aged 68.

MCCAROGHER.—On the 5th inst., at Chichester, Joseph McCarogher, M.D.Ed., aged 93.

SWEETING.—On the 13th ult., on board R.M.S. *Gallia*, Richard Sweeting, M.D., of Clapham-park, S.W., formerly many years resident at Stratford, Essex, aged 52.

TEMPLE.—On the 3rd inst., at Belvoir-terrace, Trumpington-road, Cambridge, Alfred Robert Temple, M.R.C.S., in his 71st year.

N.B.—*A fee of 5s. is charged for the insertion of Notices of Births, Marriages, and Deaths.*

METEOROLOGICAL READINGS.

(Taken daily at 8.30 a.m. by Steward's Instruments.)

THE LANCET OFFICE, Nov. 10th, 1881.

Date.	Barometer reduced to Sea Level, and 32° F.	Direction of Wind.	Dry Bulb	Wet Bulb	Solar Radia in Vacuo	Max. Temp Shade	Min. Temp	Rain fall.	Remarks at 9.30 A.M.
Nov. 4	29·91	S.W.	58	57	..	61	37	·11	Raining
,, 5	29·97	S.W.	58	55	..	56	53	·01	Cloudy
,, 6	30·12	W.	55	45	..	60	38	·10	Bright
,, 7	30·28	W.	52	50	..	57	46	..	Overcast
,, 8	30·22	S.E.	53	53	..	56	49	..	Foggy
,, 9	30·09	S.E.	47	46	..	57	43	..	Foggy
,, 10	30·00	W.	56	55	..	60	44	..	Overcast

Medical Diary for the ensuing Week.

Monday, Nov. 14.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M. each day, and at the same hour.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M. each day, and at the same hour.
METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.
ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
ST. MARK'S HOSPITAL.—Operations, 2 P.M.; on Tuesday, 9 A.M.
MEDICAL SOCIETY OF LONDON.—8.30 P.M. Mr. Wordsworth will exhibit a Child, the subject of Congenital absence of both Eyeballs.—Mr. Francis Mason will show the parts removed from a Case of Congenital Deformity of the Rectum after Littré's Operation.—Dr. Robert Lee, "On the Cutaneous Diseases of Children."—Dr. Stephen Mackenzie, "On Pityriasis Rubra and its Allies."

Tuesday, Nov. 15.

GUY'S HOSPITAL.—Operations, 1½ P.M., and on Friday at the same hour.
WESTMINSTER HOSPITAL.—Operations, 2 P.M.
WEST LONDON HOSPITAL.—Operations, 2 P.M.
STATISTICAL SOCIETY.—7.45 P.M. Mr. Caird's Opening Address, "On the Land Question."
PATHOLOGICAL SOCIETY OF LONDON.—8.30 P.M. The following specimens will be shown:—Case of Extra-uterine Fœtation; Pulsation of the Liver (living specimen); Thorax of an Infant with Rickety Deformity; Ossified Adenoma of Skin; Aneurism of Aorta, with Secondary Pouch; Two Teeth from an Infant three days old; Specimen of Odontoma; Hypertrophied Toe-nail seven inches long.

Wednesday, Nov. 16.

NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 10 A.M.
MIDDLESEX HOSPITAL.—Operations, 1 P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1½ P.M., and on Saturday at the same hour.
ST. THOMAS'S HOSPITAL.—Operations, 1½ P.M., and on Saturday at the same hour.
ST. MARY'S HOSPITAL.—Operations, 1½ P.M.
LONDON HOSPITAL.—Operations, 2 P.M., and on Thursday and Saturday at the same hour.
GREAT NORTHERN HOSPITAL.—Operations, 2 P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M., and on Saturday at the same hour.—Skin Department.—1.45 P.M., and on Saturday at 9.15 A.M.
SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN.—Operations, 2½ P.M.
ASSOCIATION OF SURGEONS PRACTISING DENTAL SURGERY.—7.45 P.M. Council Meeting.—8.30 P.M. "Casual Communications."

Thursday, Nov. 17.

ST. GEORGE'S HOSPITAL.—Operations, 1 P.M.
ST. BARTHOLOMEW'S HOSPITAL.—1½ P.M. Surgical Consultations.
CHARING-CROSS HOSPITAL.—Operations, 2 P.M.
CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M., and on Friday at the same hour.
HOSPITAL FOR WOMEN, SOHO-SQUARE.—Operations, 2 P.M.
NORTH-WEST LONDON HOSPITAL.—Operations, 2½ P.M.
HARVEIAN SOCIETY.—8½ P.M. Dr. G. C. Henderson, "On a Case of Small-pox followed by Ataxy."—Dr. Cavafy, "On a Case of Sciatic Nerve-stretching in Locomotor Ataxia."
ABERNETHIAN SOCIETY (St. Bartholomew's Hospital).—Mr. Keetley, "On Tetanus."

Friday, Nov. 18.

ST. GEORGE'S HOSPITAL.—Ophthalmic Operations, 1½ P.M.
ST. THOMAS'S HOSPITAL.—Ophthalmic Operations, 2 P.M.
ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.
KING'S COLLEGE HOSPITAL.—Operations, 2 P.M.

Saturday, Nov. 19.

ROYAL FREE HOSPITAL.—Operations, 2 P.M.

Notes, Short Comments, and Answers to Correspondents.

It is especially requested that early intelligence of local events having a medical interest, or which it is desirable to bring under the notice of the profession, may be sent direct to this Office.

Letters, whether intended for publication or private information, must be authenticated by the names and addresses of their writers, not necessarily for publication.

Local papers containing reports or news-paragraphs should be marked.

We cannot prescribe, or recommend practitioners.

Lectures, original articles, and reports should be written on one side only of the paper.

All communications relating to the editorial business of the journal must be addressed "To the Editor."

Letters relating to the publication, sale, and advertising departments of THE LANCET *to be addressed "To the Publisher."*

A MEDICAL HERO.

THE *New York Medical Record* of Oct. 22nd gives a sketch of the life o Dr. Charles B. White, surgeon and major in the United States Army, who died in August last. Dr. White appears to have been a doctor of a type of which the profession can boast many representatives, not in America alone, but in our own country and throughout the world. Having entered the United States Army as assistant-surgeon at the outbreak of the War of the Rebellion in 1861, his first service was at Fortress Monroe, Va. On one occasion he and his horse were enveloped in dust and dirt by a shell, and were supposed to have been killed, but fortunately both came out uninjured. After the battle of Malvern Hill, it was necessary for several surgeons to remain with the wounded, and volunteers were called for. Dr. hite, observing hesitancy, was among the first to offer his services. At this stage of the war no consideration was shown to medical officers, and he consequently became a prisoner. He returned to the Army of the Potomac, serving in the several actions, till after the battle of Fredericksburg, when he took charge of the General Hospital at Pittsburg. He afterwards served in the West and South-west, and was made Acting Medical Purveyor at New Orleans, La., and during an epidemic of yellow fever at Jackson Barracks he was a volunteer medical attendant. What was to him an imperative duty was attended with, on this as on many other occasions during his service, great sacrifice. His conscientious ideas of personal responsibility were such, however, as never to deter him from facing either the dangers of the battle-field, the sufferings of prison life, or the ordinary terrors of pestilence. His last post was at Columbus, Ohio. Here commenced the development of an adeno-sarcoma in his left axilla, which eventually caused his death.

S. A.—If the material used be indigo, the marks will probably disappear spontaneously. Otherwise linear incision would have to be employed.

J. H. has been misinformed. Formerly there were nine dinners in the year to Council and Court of Examiners of the College paid for out of the funds. They have long been discontinued. There is a private council club of past and present members of the Council.

Mr. Laurence Gill.—Next week.

Mr. A. F. M'Gill (Leeds).—The paper has been received, and is marked for insertion.

D. W. R.—Our advertising columns will afford the information desired.

NATURE'S RESPIRATOR.

To the Editor of THE LANCET.

SIR,—I have read with approval in your last issue the annotation with the above heading. It is excellent so far, but I feel some surprise that you have not mentioned the moustache as nature's respirator. The advantages of the moustache I wrote upon from 1854 till 1857 in the Newcastle and Edinburgh papers, and still do not forget to urge its being worn as nature's respirator.

That females have no moustachios seems to me to indicate that their province is housekeeping, and not exposure to inclement weather, especially morning and night air. In warm climates men have no moustachios, or the few who have shave for coolness and comfort in consequence of their being both insignificant and unnecessary.

I am, Sir, yours, &c.,

J. CARRICK MURRAY, M.D.

Newgate-street, E.C. Nov. 9th, 1881.

MEDICAL SOCIETY OF LONDON.

To the Editor of THE LANCET.

SIR,—We should be greatly indebted to anyone who would kindly supply us with the Christian names in full of the following gentlemen who were orators of this Society:—Dr. E. Edwards, 1779; Dr. Sutton, 1791; Dr. Fryer, 1792; Mr. Saumarez, 1813; Dr. Blicke, 1836; and also of Dr. R. W. Bampfield, who obtained the Fothergillian Medal in the year 1824.—We are, Sir, yours obediently,

T. GILBART-SMITH,
EDMUND OWEN,
Nov. 8th, 1881. Hon. Secs. to the Medical Society of London.

"FOREIGN BODIES IN THE NOSTRIL."

To the Editor of THE LANCET.

SIR,—The simple means so successfully adopted by Mr. Jones should always precede more active measures, as, for example, probing the nares or the, to my mind, objectionable practice of attempting to push the substance backwards into the pharynx. It is somewhat remarkable that so plain and obvious an indication should have escaped the recognition of many surgical writers.—I am, Sir, yours faithfully,

Park-place, Leeds, Oct. 31st, 1881. CLARENCE FOSTER.

To the Editor of THE LANCET.

SIR,—Seeing in THE LANCET of this week mention made of a case of foreign body in the nares, which was got rid of by snuff, I venture to report to you two cases of the kind, one a small pebble, the other a nut, in which I tried snuff without effect, and the passage was so filled that the forceps could not be easily applied. I found in both cases that a loop of wire was readily passed beyond the foreign body, which was then very easily removed.—I am, Sir, yours truly,

Ealing, W., Nov. 5th, 1881. GEO. BROWN, M.R.C.S.E., &c.

Gas v. Coal.—See the advertisement of George's patent calorigen in our advertising columns.

Dr. Osio (Madrid).—Water-glass is a substitute for plaster-of-Paris as a case for a limb.

Hollin's Cross.—The best strength to use is one-sixth of a grain of bichloride of mercury to an ounce of water. Sometimes this causes severe pain, and must be further diluted; at other times it may be gradually strengthened as can be borne without pain.

IS THERE SUCH A THING AS A RHEUMATIC NODE?

To the Editor of THE LANCET.

SIR,—Among our best surgical text-books I find it stated that rheumatism is a cause of nodes on bones, and I would ask upon what pathological basis does such an assertion rest? Is not the rheumatic node altogether a myth and a relic of imperfect knowledge in the past? or is my experience wholly exceptional in that I have never met with a node which could be distinctly referred to a rheumatic diathesis.

With our medical wards always overstocked with rheumatism of every type—acute, subacute, and chronic—there should be no lack of cases to which I could refer my surgical class in search of a node rheumatic. Have physicians any experience of it? If so, will they not instruct us? For my part I regard it as having no real existence, but a myth which took form before the term rheumatism, as applied to pain, was more than half unravelled. True it is still that nodes give rise to so-called rheumatic pains, but is it ever true that a pain can be referred to a rheumatic node? Rather, I suspect, the later offspring of syphilis have been, through want of discrimination, palmed off as the legitimate progeny of a respectable diathesis.

I am, Sir, your obedient servant,

R. CLEMENT LUCAS, B.S. Lond., F.R.C.S.

Finsbury-square, Nov. 7th, 1881.

MEDICAL OFFICERS OF HEALTH AND MEDICAL ETIQUETTE.

To the Editor of THE LANCET.

SIR,—Referring to the letter in your last issue signed "Enquirens," I submit the following case as supplementary evidence of the hazy conception medical officers of health seem to have of their duties and the courtesy which they owe to their professional neighbours.

A tramp lies down in a lodging-house here with typhoid fever. As parochial medical officer I am asked to attend him. I deem it my duty to advise the sanitary authorities, and their medical officer calls. Instead of simply seeing to the sanitary surroundings, which I hold to have been his sole duty, he at once assumes and continues treatment of the case. During convalescence laryngitis sets in, and the operation of tracheotomy requires to be performed. Here, again, professional courtesy is ignored, as I am not even asked to be present at the operation, but an assistant of mine is asked to lend a hand.

Surely, Sir, common-sense would inform a health officer that in such circumstances he is arrogating a function not his own, while ordinary professional decency would have suggested the presence at such an operation of the original attendant. I may add that pressure of other and more remunerative cases made me at the time take no notice whatever of the treatment extended to me by my over-zealous neighbour.

I am, Sir, yours, &c.,

Peebles, N.B., Nov. 7th, 1881. ALEX. FERGUSSON, M.D.

PURE CARBOLIC ACID IN HERPES.

To the Editor of THE LANCET.

SIR,—I shall feel much obliged if any of your readers can give me any information regarding pure carbolic acid as a local application in cases of herpes. I am, Sir, yours faithfully,

Nov. 4th, 1881. M.B.

THE CASE OF ANEURISM AT THE DECCAN CENTRAL GAOL.

To the Editor of THE LANCET.

SIR,—I see that the heading of the case of aneurism, reported by Dr. Salaman and myself, and inserted in the last number of THE LANCET, p. 792, tends to convey the impression that I was one of the medical staff of the Deccan Central Gaol. This, however, was not the case. The insertion of this note will prevent any confusion, and oblige your obedient servant, E. D. MACKELLAR.

Glasgow, Nov. 7th, 1881.

QUINQUININE.

To the Editor of THE LANCET.

SIR,—In your notice of Quinquinine in THE LANCET of Oct. 15th, 1881, you erroneously attribute the introduction of this article to the firm of Mackey and Co. I beg to say they have no right or claim whatever to any merit there may be in the preparation, as the true and genuine quinquinine was originated by myself (and the title registered) more than fifteen years since, and that it is still manufactured by me and supplied to all the leading wholesale houses, and no one else has any authority or possesses the exact knowledge for producing it.

Your sense of justice will, I am sure, give this letter a place in your journal, to correct any wrong impression in the minds of the medical profession, and to avoid being the means of leading others to profit through the reputation, industry, or the property of another. Both quinquinine and Mistura Bismuthi Co. are exclusively my own productions, and from the high character and reputation they have always sustained, I feel jealous lest any imitation or misrepresentation should operate against their continued usefulness and success.

I am, Sir, yours faithfully,

17, Farringdon-road, E.C., Oct. 19th, 1881. JOHN SELLERS.

Veritas will find good descriptions of the sympathetic system in Hermann's "Handbuch der Physiologie," and in Dr. Trumet de Fontarce's "Pathologie Clinique du Grand Sympathique" (Baillière).

Enquirer.—Shepherd's Manual is perhaps the best.

State Medicine had better apply to the registrar of one of the universities which grant the degree.

Mr. R. Parker.—The question is one hardly suitable for discussion in our columns.

POOR-LAW MEDICAL RELIEF IN THE PENISTONE UNION.

To the Editor of THE LANCET.

SIR,—Some time in the month of last May, Dr. Gruggen, one of the district medical officers of the Penistone Union, wrote to the Board of Guardians asking for an increase of his stipend. It was about time that he should, for in his letter of application he showed that his district, that of Silkstone, had a population of 5213 on an area of 8830 acres; that his fortnightly average of patients was thirty-three, and that for the huge obligations he had to meet he received the annual amount of £26 10s., with extras, the latter possibly adding to his receipts some £15 more; that out of this amount he had to provide a horse, all drugs, and appliances, save cod-liver oil and quinine. After his letter had been read, the chairman remarked that Dr. Gruggen's services were rewarded by an amount not exceeding 2½d. a visit. In spite of this, the application was unanimously rejected. Thereupon Dr. Gruggen resigned. The Board immediately advertised for a successor, holding out as a bait that the future incumbent would be made the medical officer of health. The offer was accepted, and a gentleman holding one qualification was appointed; but the Board did not carry out their promise, as they appointed some one else when the health appointment fell in.

We now see from the *Barnsley Chronicle* of the 29th ult. that this last gentleman has also resigned this impossible appointment, and the Board, no way abashed, advertise in the same journal for a successor on the same terms. It is very probable that a similar advertisement may have been sent to you. Whether that be so or not, I have to ask you to publish this letter, and to urge on all Poor-law medical officers, *in posse*, to refuse to have anything to do with this Board until they have learned decency. And here let me mention that which an ex-president of the Poor-law Board once wrote to me: "Do try and educate your professional brethren up to the refusal of these ill-paid appointments. Repeatedly appointments have come before me for confirmation where I was satisfied that it would be unsatisfactory to all parties, but the Board over which I presided was powerless to interfere, for on inquiry we found that there were several applicants for the post." I do not advocate Boycotting, but if there be anyone so ill-advised as to apply for this post, I ask my brethren who live near him to refuse any and all communication with such a pariah of our profession.

I am, Sir, yours obediently,

Soho-square, London, W., Nov. 2nd, 1881. J. ROGERS.

An Old Subscriber.—We do not know why, but the College has long given up suspending the proceedings of the Council in the Hall. The proposal to engage a shorthand writer to report the proceedings came formally before the Council on the motion of the late Mr. R. Partridge, seconded by Mr. Charles Hawkins.

Umbra.—Such "amenities" are better not reported. We trust that both parties on sober reflection feel ashamed of themselves.

Dr. Louk.—We deem it better to postpone any discussion of the matter at present.

Hygiene.—We must decline to give the address of the person in question.

"CONSTIPATION IN INFANTS."

To the Editor of THE LANCET.

SIR,—In reply to the query under this heading, addressed to you by "South Devon" in your impression of this day, allow me to suggest to him the following plan, which I have never yet, in the absence of any special anatomical or constitutional cause, found to fail. Let the infants be fed on well-made oatmeal gruel and milk in proper quantities and at proper intervals: for a child from one month to two months about half the feeding bottleful, the quantity to be gradually increased until the bottle is full, say, at the fourth or fifth month, and this quantity, for each meal, should be continued until the ninth month, or until four teeth have appeared. I have said "well-made gruel." This is prepared in the following manner:—Take a tablespoonful of the common coarse but sweet (not the bitter) oatmeal; let this soak in a little more than a tumblerful and a half of cold water for some hours—say, all night; then place the meal and the water in a clean covered saucepan capable of holding double the quantity of liquid poured in; place the saucepan near the fire so as to heat the contents slowly, and after a time place it on the fire and stir the contents until, and for a minute or so after, it boils; then pour the boiling contents on to a horsehair sieve, and the creamy gruel is made. To feed a child of two months old take of this gruel two wineglassfuls and add one of milk; mix, and feed the child slowly from the bottle, interrupting the process two or three times during the course of the meal to allow of the expulsion of flatus, which always exists. For a child of four months old equal parts of the gruel and milk; at six months, one of the gruel to two of the milk. Under two months the child should be fed every hour and a half to two hours whether it calls for food or not, and not oftener; at three months every three hours; at four months every four hours, and this last interval between the meals should be maintained until the ninth month, or until four teeth appear. If no tooth appears until fifteen months, as is sometimes the case with children that subsequently become fine specimens of robust health, no other food whatever should be allowed but the "oatmeal gruel" and milk until that age. No clocks are required in the room where lives a child fed at stated times; he becomes a four hours' alarm. As to heating the remainder of the gruel when once it has become cold, measure off into the bottle the required quantity, and stand it in boiling water to heat, and then add and mix the cold milk. Of course this food should always contain a little sugar and salt. In the event of the boiling (freshly made) gruel being used, a reasonable time must be allowed for the mixture with the milk to cool down. "Holding out" the child over its chamber at stated times should in no case ever be neglected. The addition of a little lime-water will correct any pyrosis that may occur. The child should be kept in the open air as much as possible. Unfortunately there is a vast amount of ignorance on the subject of the feeding of infants.

I am, Sir, yours, &c.,

Oct. 22th, 1881. OATMEAL AND MILK.

To the Editor of THE LANCET.

SIR,—In reply to "South Devon's" inquiry as to constipation, with white and hard stools, I would suggest that the infants so affected should for a time have a few drops of pepsine wine (three drops for a child of three weeks, and eight or ten drops for one of eight or nine months old) after each milk meal. This should be continued for a few weeks, and gradually left off. I have found this plan effectual in promoting the assimilation of the curd to which the white appearance of the stools is due. Constipation rarely continues under this treatment, but it is sometimes necessary to supplement it by the introduction of a soap bougie smeared with castor oil into the rectum. If this is done for a few days, just before the baby is washed, the habit of evacuating the bowel at a certain time is induced, and often continues permanent.

Many years ago, soon after the introduction of pepsine, I had under my care in India a child of about nine months old suckled by a native wet-nurse who had just recovered from a smart attack of dysenteric diarrhœa. The stools were as described by "South Devon." She was treated by quarter-grain doses of pepsine after suckling; in a day and a half the stools became of the natural bilious appearance. She improved rapidly. Wishing to assure myself that it was the pepsine which had caused the change, I ordered it to be discontinued after ten days' use, and the stools in thirty-six hours again became white and curdy. In less than two days after the resumption of the pepsine all was changed, and again the evacuations were normal. This experiment convinced me that these white stools were due to deficient gastric juice, and it also seemed to point out, what is now well known, that a proper secretion of bile depends on proper stomach digestion.

I am, Sir, yours faithfully,

Egham-hill, Oct. 28th, 1881. T. M. LOWDES, M.D.

INCREASE OF PEABODY BUILDINGS.

THE recent opening of a new block of Peabody buildings, in our immediate vicinity at Bedfordbury, has raised the population housed in improved dwellings within the metropolis, through the operation of the trust, above ten thousand persons. It appears from a return issued by the secretary to the trust that on the 30th September last the inhabitants of the thirteen groups of Peabody-buildings already in occupation numbered 10,949. Nearly 22 per cent. of the residents were of children under five years of age, and 32 per cent. of children aged between five and twenty years, 44 per cent. of adults aged between twenty and sixty years, and only 2 per cent. of persons aged upwards of sixty years. Notwithstanding the large proportion of young children, a population containing so abnormally large a proportion of children between five and twenty years, and so exceedingly small a proportion of elderly persons, housed under such favourable conditions, should give an exceptionally low death-rate.

Scrutator's letter shall receive attention next week.

A Country Practitioner has not enclosed his card.

Mr. Colquhoun.—The matter was mentioned last week in a letter by the hon. secretary for the dinner.

Mr. James T. Whitely.—Yes, if the deformity is treated early. A qualified surgeon's advice had better be sought.

Reader.—Consult the reports published in the last two annual reports of the Local Government Board. The Board has published instructions for the preparation of reports by medical officers of health, and our correspondent should be guided by them.

BROUGHAM CABS.

To the Editor of THE LANCET.

SIR,—The advantages of brougham cabs are very few indeed; the disadvantages are manifold and very great—viz., the immense weight of 7 to 8 cwt. (as much as the brougham, without its advantages); the weight upon the horse's back when the coachman is not upon the seat at the back; the heavy dragging and wear and tear upon the horse; the need of a thoroughly good, strong, and expensive horse, the great outlay in replacing him frequently, and the liability of the coachman being pitched over the top. In common language, "horses are killed and dragged to pieces" by this kind of vehicle, one gentleman actually having had two or three horses in a very short time whilst keeping one of these carriages. Down hill the weight upon the horse's back is immense, and tends to throw him down. I never knew of a medical man having two of these carriages in succession; medical men soon tire of them, and cast them aside. One brougham cab in this neighbourhood has rapidly changed hands three or four times in a short period. None of them run easily, and on a fine day there is no way of opening them or even leaving the cover at home. Brougham cabs require not only an expensive and good horse, but a good and expensive man, who is exposed to wet and cold, with their attendant risks. There is immense wear and tear upon the wheels from the great weight, which with two men would probably exceed half a ton. The primary cost of this kind of vehicle, too, reaches close upon £160. After many years' experience with horses and vehicles, I can truly say that I would not have one of these carriages if anyone would make me a present of it. Possibly your correspondent may ask what kind of vehicle I recommend for the medical man, and, if so, I can give him information which may greatly add to his comfort and considerably save his expenditure. The knowledge has cost me much labour and money; nevertheless, with the usual philanthropy of our profession, I offer it gratuitously.

My carriage is an elegant and light one, weighing only 3 to 4 cwt., built in the highest perfection of the coachbuilder's art, a two-wheeled gig, suited to any size of horse, cob, or pony, driven from the inside, and having an elegant leather hood, which not only opens and closes, but may be detached altogether. The weight then is reduced to about 2 to 3 cwt., which any sized cob or even pony may easily work. A groom need not be taken, or if he be he is under shelter in rain. A medicine-chest is fitted up to carry any drugs or instruments likely to be wanted in a hurry. This kind of carriage, as a specialty, is being built, and has been placed in the hands of many practitioners in different parts of the country, by Mr. W. Beddoes Moore, of Oldswinford, Stourbridge, all of whom have been delighted with it. Its primary cost is forty guineas, and probably one quarter of the annual outlay.

I am, Sir, your obedient servant,

Stourbridge, Nov. 7th, 1881. PRACTICAL EXPERIENCE.

To the Editor of THE LANCET.

SIR,—In reply to your correspondent's, a "Country Doctor," question about brougham cabs, I have driven one of Marston's, of Bradford-street, Birmingham, for two years over all kinds of roads averaging a hundred miles a week, and I can honestly say I never sat in an easier vehicle. I find myself less weary after a long journey, and getting in and out are so much easier than a gig, with very little increase, if any, of weight. I have found mine wear far better considering the heavy work it has had than I could have anticipated. I shall be happy to answer any further inquiries "Country Doctor" may wish to make if he will write direct to JOHN INGLEBY MACKENZIE, M.B.

Rugby, Nov. 6th, 1881.

THE SANITARY COMMITTEE TO THE ST. MARYLEBONE VESTRY.

To the Editor of THE LANCET.

SIR,—Permit me to give an emphatic contradiction to the report of the Sanitary Committee to the St. Marylebone Vestry yesterday, that at a recent interview with the Committee I stated I had no charge to bring against the sanitary authorities. What I did say was that I did not blame individuals, but the system pursued for the past, for the failure of the sanitary authority of the parish (in other words the Vestry) to prevent the epidemic of typhus fever (still spreading), and to arrest it immediately after its outbreak. There have been forty-one cases in all, with six deaths, up to the present. The sanitary authority, typhus being at once the most contagious and the most easily preventable of diseases, ought to have suppressed the epidemic more than a month ago, and thus saved several lives. Had I not stepped in, at some detriment to health and private practice (keeping up only with the aid of professional assistance, constant Turkish baths, extra diet, and the non-use of stimulants), and discharged the duty the Vestry neglected, the cases would have numbered hundreds and the deaths at least twenties. Typhus cannot survive fresh air, and the removal to the excellent hygienic conditions of Homerton Fever Hospital has saved probably seventeen lives that would have been lost had the patients remained in their insanitary homes. Of the cases so removed a number ought to have been attended to by the Vestry. I had nothing to do with these, but had not the heart to see them die without a chance of life. The paupers are the care of the Guardians, and right well do these gentlemen fulfil their trust. But no one seems to care whether struggling ratepayers, who are not paupers, live or die. In March last, from a non-pauper case of small-pox, which was not removed by the Vestry, eleven cases followed in Charles-street. I also told the committee that their professed disinfection was but an outside cleaning of the cup and platter, and was a delusion and a snare. Where attempted it was practically valueless; and I instanced two recent cases where no attempt was made. One was a man who was allowed to sleep on the infected bed from which a case had been sent the week before. The other was the poor woman on whom the inquest was held, and who slept and died on the infected bed from which her child had been taken seven days previously.

About nineteen years ago there was an outbreak of typhus fever in the same street and neighbourhood, when the relieving officer (then called "inspector") and the district medical officer caught the disease and died. The sanitary authority ought to have at once remedied the insanitation; but after repeated subsequent epidemics of contagious diseases the sewage from the houses is still semi-stagnant and the sewerage defective, and one house is actually built over a privy, which latter ventilates between the boards into the inhabited room above.

Let me bear, after repeated personal inspection of my cases in the typhus wards, ungrudging testimony to the excellence of the Homerton Fever Hospital, the floors of which are so clean that a dinner could be eaten off them, and to the efficiency and skill of the superintendent, Dr. Collie, and the medical and nursing staff. As I told the committee, if they would only distribute handbills and other information among the inhabitants of the healthfulness and comfort of the Homerton Hospital, much prejudice would be removed, and their own sanitary efforts much aided.

I cast no reflection on my friend Dr. Blyth and his staff, or even on the Vestry. The traditional conservatism of the *ancien régime* has been too much for them; but I venture to appeal to the latter intelligent and spirited body to immediately reorganise their system, and systematically ascertain the sanitary condition of the whole parish. By so doing they will earn the respect and gratitude of the entire community.

I am, Sir, your obedient servant,

NORMAN KERR, M.D.

Grove-road, Regent's-park, Nov. 4th, 1881.

A SUPPLEMENTARY BLADDER.

DR. L. R. DIBBLE, of Albion, Michigan, reports in an American contemporary the case of a man, aged seventy years, who was afflicted with phimosis for twelve years, and whose foreskin became pouched in consequence of difficult micturition. When this pouch was distended it measured nine inches in circumference. Circumcision effected, of course, a complete cure.

Lieut.-Colonel.—We do not recommend particular physicians or surgeons.

COMMUNICATIONS not noticed in our present number will receive attention in our next.

COMMUNICATIONS, LETTERS, &c., have been received from—Dr. Carrick Murray, London; Mr. Herbert Canton, London; Mr. Clement Lucas, London; Mr. R. Parker, Liverpool; Mr. Vachell, Cardiff; Dr. Norman Kerr, London; Mr. A. G. Bell; Dr. Blake, London; Mr. Clarence Foster, Leeds; Surgeon-Major MacCormack; Mr. B. J. Tuck, Seaford; Dr. Atkinson, Kingston-on-Thames; Mr. Harding, Westgate-on-Sea; Mr. Brown, Ealing; Mr. Heneage, Twickenham; Mr. Reginald Harrison, Liverpool; Mr. West, London; Dr. Morson, West Maitland; Mr. H. T. Wood, London; Mr. E. W. Wallis, London; Dr. Mackellar, Glasgow; Dr. F. N. Macnamara, London; Dr. Furnell, Madras; Mr. J. T. Whitely, Sheffield; Dr. Gilbart Smith, London; Mr. Adams Frost, London; Mr. Shirley Murphy, London; Dr. Lush, Fyfield; Dr. Brett, Watford; Dr. Fergusson, Peebles; Mr. Colquhoun, London; Mr. Sorel, London; Mr. Bond, London; Mr. Macaulay, Newcastle-on-Tyne; Dr. Ogilvie Will, Aberdeen; Dr. McAldowie, Stoke-upon-Trent; Mr. Appleyard, Manningham; Mr. Lawrence Gill, Whitton; Mr. Lloyd; Mr. Startin, London; Mr. Atkinson, Cambridge; Mr. Whitford, London; Mr. Tunnicliffe; Mr. Fraser, Cowans Bog; Mr. Davis, Detroit, U.S.A.; Dr. John Tudor, Dorchester; Dr. G. L. Tanyhill, Baltimore; E. Chapman and Co.; Dr. Bristowe, London; Mr. Schanenburg, Lahr; Mr. Jesse, Henbury; Mr. Bagnall-Oakeley, Swinefleet; Mr. Jules Para, Paris; Rheumatism; Practical Experience; Scrutator; S. D. C.; Hygiene; Reader; Gas *v.* Coal; S. A.; Enquirer; M.B.; F.R.C.P.; M.R.C.S.; H. W.; &c. &c.

LETTERS, *each with enclosure*, are also acknowledged from—Mr. Eaton, Ancaster; Mr. Knight, Birmingham; Dr. Arnison, Newcastle-on-Tyne; Dr. Arminson, Preston; Mr. Morris, Swansea; Mr. Wheeler, Sheffield; Mr. Rainbird, Saxilby; Mr. Willey, Birmingham; Mr. Bond, Cobsworth; Mr. Deacon, Knighton; Mr. Scattergood, Leeds; Mr. J. Hutchinson, London; Mr. Horne, Bootham; Mr. Wylie, Belfast; Mr. Merryweather, Guisboro'; Mr. Buck, Leicester; Dr. Thurnam, Yardley-Hastings; Mr. Benthall, Hartlepool; Dr. Oliver, Durham; Dr. Thomas, Sheffield; Dr. Dabs; Messrs. Deeks; Archdeacon Grant, St. Albans; Mr. Young, Chilton Polden; Dr. Taylor, Woodstock; Mr. Taylor, Newcastleton; Mr. Seymour, Cheltenham; Mr. Pearson, Ulverston; Dr. Jones, South Kensington; Mr. Burgham, Alfreton; Mr. Wolverson, Alfreton; Dr. Hunter, Pontypridd; Dr. J. P. Lewis, London; Mr. Beatson, Glasgow; Messrs. Atkinson and Crust, Spalding; M.R.C.S., Grafton-road; New North-road; Principal, Seaford; E., Sheffield; S. D., Salisbury; Medicus, Leicester; M.B., Pimlico; E., Llanwrtyd Wells; Egnes; Vox, Sowerby-bridge; X. Y. Z., Brighton; J. S., Leeds; M.D., Manchester; Scripton; C. D.; T. A. C., Horncastle; F. W. C.; H. A.; X. A.; A. H., Charing-cross; M.R.C.S., Nottingham; M.B., Taunton; Zero; Galen; X. Y. Z., London; 11 to 1; Rus, London; R. H. M., Callington; X. Y. Z., Leamington; Assistant; P. Q. R., London; Medicus, Manchester; Osric; D. J. S.; Licentiate; Wundarst; &c., &c.

Carlisle Patriot, Sydney Evening News, Sydney Morning Herald, Literary Microcosm, Derbyshire Times, Knowledge, Belfast Evening Telegraph, Lux, &c., have been received.

SUBSCRIPTION.

POST FREE TO ANY PART OF THE UNITED KINGDOM.

One Year.....£1 12 6 | Six Months £0 16 3

TO CHINA AND INDIA ..... One Year, 1 16 10

TO THE COLONIES AND UNITED STATES.. Ditto, 1 14 8

Post Office Orders should be addressed to JOHN CROFT, THE LANCET Office, 423, Strand, London, and made payable at the Post Office, Charing-cross.

Notices of Births, Marriages, and Deaths are charged five shillings.

Cheques to be crossed "London and Westminster Bank."

ADVERTISING.

Books and Publications	£0 5 0
Official and General Announcements	0 5 0
Trade and Miscellaneous Advertisements	0 4 0
Seven lines and under (each averaging ten words).	
Every additional Line	0 0 6
Front Page per Line	0 1 3
Quarter Page	1 10 0
Half a Page	2 15 0
An entire Page	5 5 0

The above Scale of Charges is arranged upon the basis of the classification adopted in the Index.

NOTICE.—Advertisers are requested to observe that it is contrary to the Postal Regulations to receive at Post-offices letters addressed to initials only.

An original and novel feature of "THE LANCET General Advertiser" is a special Index to Advertisements on page 2, which not only affords a ready means of finding any notice, but is in itself an *additional* advertisement.

Advertisements (to ensure insertion the same week) should be delivered at the Office not later than Wednesday, accompanied by a remittance.

Answers are now received at this Office, by special arrangement, to Advertisements appearing in THE LANCET.

Terms for Serial Insertions may be obtained of the Publisher, to whom all letters relating to Advertisements or Subscriptions should be addressed.

Advertisements are now received at all Messrs. W. H. Smith and Sons' Railway Bookstalls throughout the United Kingdom, and all other Advertising Agents.

Tables of Contents, with the Index of Advertisements, for each Number can be had on application to the Publisher.

Agent for the Advertising Department in France—J. ASTIER, 67, Rue Caumartin, Paris.